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# AMERICAN DRUGGIST

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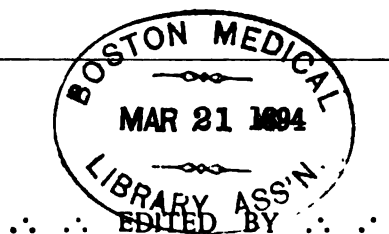
# PHARMACEUTICAL RECORD.

A WEEKLY ILLUSTRATED

-- Journal of Practical Pharmacy. --

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**VOLUME XXIII. JULY TO DECEMBER, 1893.**



CASWELL A. MAYO AND THOMAS J. KEENAN.

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# American Druggist and Pharmaceutical Record.

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## U. S. PHARMACOPŒIA 1893.

IN response to inquiries received from a number of readers regarding the probable date of publication of the new Pharmacopœia, we would state that the revised volume will in all likelihood be received from the printers in time for distribution at the Chicago meeting of the American Pharmaceutical Association.

Although it forms a more bulky volume and has cost more to publish, the committee of revision has arranged to furnish it at a lower price than that charged for the edition of 1880.

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## THE DANISH PHARMACOPŒIA.

A GREAT and important acquisition to the literature of pharmacy has appeared in the publication, on June 1, of the long promised Danish Pharmacopœia. In this publication, which will be the authoritative standard in the preparation of pharmaceuticals for the Danish nation, and which will also be regarded as an authoritative treatise in Norway and Sweden, the object kept in view by the compilers has been to harmonize and combine in one whole, if possible, descriptions of the medicinal substances and combinations, as also the different processes and methods of manufacture as followed in each of the countries mentioned. That this has been accomplished to the general satisfaction of the pharmacists for whose guidance the work is issued is very evident from recent accounts of the publication, which have appeared in the foreign pharmaceutical press.

The Pharmacopœial Commission of Denmark, which corresponds to our Committee of Revision of the Pharmacopœia, which was organized in October, 1889, brought its work to a close in November, 1892, when the preface which appears in the opening pages of the new edition was signed by each member of the commission, the list of names being headed by that of the president, Professor F. Trier, who had succeeded the late T. S. Warncke, who attained a great and wide reputation as a teacher of pharmacology before his death in December, 1890.

After the style of the 1890 edition of the German Pharmacopœia, the new edition of the Danish Pharmacopœia is printed in the Danish language. The only Latin terms used, as such, appear as headings or chief titles of the different articles of the Pharmacopœia. Like the Pharmacopœias of all countries, with the exception of the United States, that of Denmark is recognized as a legal standard and is published under the authority of the government. August 1, 1893, is the date which has been set apart for the inauguration of the new Pharmacopœia as the legal and authoritative standard.

The preface of the work is taken up with a number of rules for the guidance of apothecaries. Among these as indicating the scope of the work may be mentioned the following :

The gramme and cubic centimetre are the units of weights and measures.

Parts when mentioned mean parts by weight.

In measuring degrees of temperature the centigrade or Celsius's scale is official.

Normal temperature, meaning 15 degrees C., is the temperature which all calculations in weights and measures must be based upon unless otherwise indicated.

What will be regarded as an innovation and a novelty is an introduction into the work of a colorometric standard, the colors of liquids being determined by their appearance when 2 c.c.'s are examined by looking vertically through the liquid.

*Aqua* is understood to be water which has been boiled, allowed to cool, and then filtered.

The arrangement of the volume throughout is alphabetical, and attached to the chief titles are signs denoting the potency of the preparation. Footnotes are also appended to each page embodying information as to the single and daily dose of the medicine for adults. The range of medicinal substances and preparations is large, 575 in all representing the number of official remedies. Included among these are many articles of the newer materia medica, and many articles official in other pharmacopœias but not included in former editions of the Danish manual. Among these additions are to be noted acetanilid, liquid carbolic acid, chromic acid, gallic acid, lactic acid, ethereal oil, oil of sandalwood, dried albumen, antipyrine, bromide of ammonia, bromide of homatropine, bromide of soda, empty gelatine and starch capsules, mustard paper, hydrochloride of apomorphine, hydrochloride of cocaine, hydrochloride of pilocarpine, fluid extracts of cinchona, digitalis, buckthorn, gentian, hydrastis, ipecacuanha, quassia, cascara sagrada and ergot. Butyl chloral, kaolin, lanolin, menthol, liquid paraffin, sodio-cafein salicylate, salol, the seed and tincture of strophanthus, sulfonal, thymol and vaseline are among the newer remedies introduced. In considering the additions which should be made to a new pharmacopœia, the *Farmaceutisk Tidsskrift*, in the course of a reference to the new work, rightly observes that the rule ought to be followed of having too many, rather than too few. Obsolete remedies should, of course, be excluded, but old remedies, even when they are less employed than formerly, should not be hastily abandoned, for, other things being equal, they serve as fit mementoes of the medical lore of past times, and their inclusion within proper limits is to be commended. In the selection of newer remedies the task of differentiating between the ephemeral and lasting, or what is likely to be, presents some features of difficulty. From the viewpoint of the pharmacist there are no advantages to be gained from incorporating newly discovered but untried medicinal substances in a new pharmacopœia. With the physician, however, it is different, as when the remedy is made official he will find its properties described and its dosage as well its tests of purity and general characteristics given. The Swedish Pharmacopœia in this regard presents advantages not possessed by the pharmacopœias of other nations. Included in it are remedial substances, which are not official in the sense of that word. They are classed with the other substances

for purposes of reference chiefly, and are distinguished from the former or official drugs by asterisks.

To recur to the new Danish Pharmacopœia, a table of the number of drops contained in one gramme of the liquid accompanies the description of the official liquids, which number 41. Solution of arseniate of soda contains the least number of drops to the gramme, being credited with eighteen. Ether stands highest with ninety. With regard to the dropping surface it is directed that the orifice of the droppers must be exactly round and measure 3 mm. in diameter; also that 20 drops of water at 15° C., dropped from such a dropper, shall measure one gramme. As in the new German pharmacopœia, the work closes with two indexes giving both the Latin and Danish names of the official drugs. Much information of a general character likely to be of value to pharmacists is contained within its covers, and this recent acquisition to pharmaceutical literature should take a high place among the pharmacopœias of the world. Pharmacy like medicine is a catholic profession, and its principles are the same everywhere. It may not be that we, of this decade, shall see the realization of Professor Remington's ideas with reference to an International Pharmacopœia, but we cannot hold with those who deem that progress toward the unification of authorities contemplated in the innovation proposed by the president of the American Pharmaceutical Association will be retarded by the publication of national pharmacopœias which can fairly be regarded as individual histories of the progress made in each country in the art and science of pharmacy.

#### HAVE WE A SPECIFIC FOR DIPHTHERIA?

THE exaggerated estimate placed upon the value of the tuberculin of Koch, which was partly due to the sensationalism of the daily press, rendered the reaction in the public mind all the greater when it was determined that after all it was not a specific for that dread disease tuberculosis.

It has been observed, however, that tuberculin is of much value as an aid in diagnosis, for when administered in doubtful cases the diarrhœa set up in one patient and the profuse menstruation induced in another indicated that in the one case the bowels and in the other the uterine appendages were the seat of a tuberculous affection.

Aside from this, the studies made on this substance have paved the way for a series of investigations which hold out great promise.

The Koch Institute for Infectious Diseases has recently issued a report on the diphtheria serum of Behring, which is on the whole favorable to the conclusion that in it we possess what is in a sense a specific for this disease. This serum is derived from diphtheria-immune sheep, and is less active when newly prepared than after keeping for some years.

Experiment having demonstrated its therapeutic value on animals, it was next tried on man, and of thirty cases of undoubted diphtheria treated twenty-four recovered, showing a death-rate of twenty per cent.

under this treatment as contrasted with a death-rate of about fifty per cent. under the ordinary treatment. Of eleven children treated only two died, and one of these had at the same time septicemia and the other tuberculosis.

The serum is administered by hypodermic injection with a Koch syringe over the breast. By light massage twenty cubic centimeters can be so distributed under a child's skin as hardly to be noticeable.

The serum is under governmental control, and the restrictions which were thrown around Koch's tuberculin will probably also be laid upon this product, so that it may not be obtainable commercially for some time. In the meanwhile we must await with keen interest the further experiments which must be made before a definite answer can be given to the question Have we a specific for diphtheria?

### Pharmaceutical Queries and Answers.\*

By E. L. PATCH.

1. "What makes the great difference in color in Eisenzucrc tablets?"

Answer.—The amount of iron in the tablet. The general standard is 30 per cent. of metallic iron or 4.28 per cent. ferric oxide. Examination of different samples shows them to vary from 2.6 per cent. to 3.3 per cent. of oxide. The weaker iron compounds give a lighter colored tablet. Some were found to be, standard Eisenzucrc 27 parts, sugar of milk 16 parts, powdered soap 1 part.

2. "What is La Mott's golden tincture?"—C.

We do not know this preparation, having knowledge of but four formulas for golden tincture. They are as follows:

- |    |  |          |
|----|--|----------|
| a. | Red lavender.....  | 1 part   |
|    | Ether.....   | 2 parts  |
|    | Acetated tinct. of opium.....                                | 2 parts  |
| b. | Ether.....   | 1 part   |
|    | Chloroform.....  | 1/2 part |
|    | Laudanum.....  | 1 part   |
|    | Alcohol.....   | 1 part   |
| c. | The same as b, only chloroform 1/4 part instead of 1/2 part. |          |

#### ECLECTIC FORMULA.

- |    |                      |       |
|----|----------------------|-------|
| d. | Balsam. tolu.....    | 1 i   |
|    | Resin gualac.....    | 1 i   |
|    | Hemlock gum.....     | 1 i   |
|    | Myrrh.....           | 1 i   |
|    | Oil hemlock.....     | 3 iss |
|    | Oil wintergreen..... | 1 i   |
|    | Alcohol.....         | Oiv   |

M. Dose 3 i for rheumatism, wind colic and water brash.

3. "What is confection democratis or theriac?"

There are several formulas for this product. That of the London Pharmacopœia 1746 contains sixty-one ingredients and one grain of opium in 74 grains.

That of the old Paris Codex contained seventy-two ingredients and one grain of opium in 72 grains.

The simplest is that of the Edinburgh Pharmacopœia 1744, which contains ten ingredients and one grain of opium in one hundred, as follows:

- |                      |        |
|----------------------|--------|
| Serpentaria.....     | 6 oz.  |
| Contra-yerva.....    | 4 oz.  |
| Valerian.....        | 4 oz.  |
| Aromatic powder..... | 3 oz.  |
| Gualac resin.....    | 2 oz.  |
| Castor.....          | 2 oz.  |
| Nutmeg.....          | 2 oz.  |
| Saffron.....         | 1 oz.  |
| Opium.....           | 1 oz.  |
| Honey.....           | 75 oz. |

Mix.

4. "Why should 48 grains of sulphate of quinine and 1 oz. of fluid extract of licorice root separate a dense bulky precipitate?"—G.

When our attention was first called to this we thought

\* Selections from a paper presented to the Massachusetts Pharmaceutical Association.

it possible that an acid sulphate of quinine had been used. Trial with five different makes of fluid extract and a carefully examined normal sulphate proved that in each case the sulphuric acid was liberated from the quinine and the precipitate produced.

In some cases it occurred within half an hour and in others it required longer time. It was found that 12 drops of 10 per cent. ammonia water added to the fluid extract before triturating with the quinine prevented it.

5. "What accounts for the great variation in color of fl. ext. belladonna root?"

The difference in alcoholic strength of menstruum used. The U. S. P. 1880 calls for strong alcohol, 91 per cent. by weight strength; the commercial products are made with weaker alcohol, which dissolves more coloring matter, and inert extractive.

6. "What causes the variation in fl. ext. doggrass?"

The U. S. P. calls for the extraction of the drug by boiling water, its concentration by evaporation, and lastly the addition of alcohol. The product is a syrupy body with a sweet, somewhat molasses like odor. The commercial, made by direct percolation with alcohol and water are distinctly different, the menstruum rejecting much that is extracted by boiling water.

7. "What shall I dispense for thymol water?"

1 grain of thymol and 4 fluid ounces of distilled water.

9. "My syr. albuminate of iron constantly spoils and I do not succeed in making it from the scales. What will I do?"

"Albuminate of iron is soluble in alkaline solution, and this on standing becomes bicarbonated, and can no longer hold the iron in solution."—Tscheppé, Am. Phar. Assoc.

Dry albuminate of iron is insoluble if made from alkali soluble albuminate. A solution requires from 5 to 8 per cent. of alcohol to keep. It should contain 42 per cent. of metallic iron or 6 per cent. of  $\text{Fe}_2\text{H}_2\text{O}$ .

Try an extemporaneous solution made as follows:

- |   |      |
|---|------|
| Sol. dyalized iron (5 per cent. oxide)..... | 1 i  |
| Sol. acid egg albumen.....                  | 1 ii |
| Syrup.....                                  | 1 i  |
| Alcohol.....                                | 1 i  |

Make the acid solution of egg albumen by beating 3 ss of albumen with 3 iiss of water, adding 6 minims of strong hydrochloric acid.

10. "Our official syrup of lactophosphate of lime precipitates and decomposes. Can you tell us how to remedy it or give us a better formula?"

Try the following:

- |  |         |
|--|---------|
| Precipitated carbonate of calcium..... | 20 G.   |
| Phosphoric acid, 50 per cent.....      | 25 G.   |
| Lactic acid, 75 per cent.....          | 50 G.   |
| Orange flower water.....               | 125 G.  |
| Sugar.....                             | 950 G.  |
| Benzoic acid.....                      | 5 G.    |
| C. P. hydrochloric acid.....           | 1 G.    |
| Distilled water to make.....           | 1670 G. |

11. "What are the liquid and solid smelling salts of the market? Are they sulphate of potassium or sulphate of ammonium?"—L. G. P.

Some are mixtures of ammonium chloride, potassium carbonate and some ammonium carbonate. The potassium carbonate and ammonium chloride react to produce potassium chloride and ammonium carbonate.

One molecule of  $(\text{K}_2\text{CO}_3)_3\text{H}_2\text{O}$ , or 330 gms., requires 4 molecules of  $\text{NH}_4\text{Cl}$  or 213.16 gms.

Then mix gran. salt of tartar, 2 parts.  
" chlor. of ammon. 5 parts.

Add a few small lumps of ammonium carbonate and slightly moisten the mass with aromatic spirit of ammonia or with a mixture of equal parts of 28 per cent. ammonia and alcohol, perfumed to suit.

13. "Please tell me the how and why for this problem. How much 28 per cent. ammonia will it take to make a quart of official?"

We presume that by "official" you mean 10 per cent. water of ammonia, but you should remember that 28 per cent. is also official as stronger water of ammonia. One quart of water at standard temperature weighs  $2 \times 7,291$  grains or 14,582 grains. One quart of 10 per cent. ammonia water, having a sp. gr. of 0.959 would weigh  $0.959 \times 14,582$  grains, or 13,984 grains.

It would require 10 parts of 28 per cent. to make 28 parts of 10 per cent. (one part of 28 per cent. can make as many parts of 10 per cent. as 10 is contained in 28, or 2.8 parts. If 2.8 parts of 10 per cent. require one part of 28 per cent., 28 parts would require 10 parts), and 13,984 grains would require a like proportion, or 28 parts of 10 per cent. is to 13,934 grains of 10 per cent. as 10 parts of 28 per cent. is to 4,994 grains of 28 per cent.

Then 4,994 grains of 28 per cent. and enough distilled water to make 13,984 grains (8,990 grains of water) gives one quart of 10 per cent.

14. I have a lot of spoiled Gardner's syrup of hydriodic acid. How can I restore it?

Its red color is due to free iodine, resulting from the decomposition of the acid. The simplest method is to titrate with sodium hyposulphite solution. The iodine is converted into sodium iodide, which is colorless, and the hyposulphite (thio sulphate) into sodium tetrathionate or tetrasulphate as follows:  $2\text{Na}_2\text{S}_2\text{O}_3 + \text{I}_2 = 2\text{NaI} + \text{Na}_2\text{S}_4\text{O}_6$ .

16. "What causes the change in mist. ferri et ammon. acetatis, or Basham's mixture? I cannot make it clear."—J. L. D.

If your solution of ammonium acetate is too strong of ammonium carbonate, as is often the case, the iron is precipitated. If each ingredient is of correct strength a clear solution always results, but it will not keep. The iron acetate formed becomes oxyacetate and precipitates. A little excess of acetic acid hinders the change and a little hydrochloric acid prevents it, but alters the character of the mixture. *The new U. S. P.* will drop the syrup and substitute *glycerin* and call it *liquor ferri et ammonii acetatis*. The formula will be:

|                                   |          |
|-----------------------------------|----------|
| Tincture of chloride of iron..... | 20 c.c.  |
| Diluted acetic acid.....          | 30 c.c.  |
| Solution of ammonium acetate..... | 200 c.c. |
| Aromatic elixir.....              | 100 c.c. |
| Glycerin.....                     | 120 c.c. |

Water to make 1,000 c.c.

### Tests of Death.\*

By EDWIN HAWARD, M.D. EDIN., F.R.C.S. ENG.

A case has come lately under my observation in which the value of the diaphanous test of death has been illustrated at its just worth, and as the matter is one of supreme practical moment I think it may be considered deserving a brief notice in the pages of *The Lancet*. The diaphanous test consists in taking a hand of a supposed dead person, placing it before a strong artificial light, with the fingers extended and just touching each other, and then looking through the narrow spaces between the fingers to see if there be there a scarlet line of light. The theory is that if there be such a line of scarlet color there is some circulation still in progress and therefore evidence of vital action, whilst if there be no illumination then the circulation has ceased and death has occurred. The French Academy of Medicine was so impressed with the value of this test that it awarded, I believe, to the discoverer of it a considerable prize. The illustration I am about to give indicates, however, that this test must be received with the utmost caution. The facts run as follows: I was called in January last to visit a lady seventy-three years of age, suffering from chronic bronchitis. She had often

suffered at intervals from similar attacks during a period of twenty-five years. The present attack was very severe, and as she was obviously in a state of senile decrepitude her symptoms naturally gave rise to considerable anxiety. Nevertheless she rallied and improved so much that after a few days my attendance was no longer required. I heard nothing more of this lady until Feb. 6th—a period of three weeks—when I was summoned early in the morning to see her immediately. The messenger told me that she had retired to bed in the usual way and had apparently died in the night, but that she looked so lifelike there was great doubt whether death had actually taken place. Within half an hour I was by her bedside; there was no sign of breathing, of pulse, or of heart-beat, and the hands, slightly flexed, were rather rigid, but the countenance looked like that of a living person, the eyes being open and lifelike. I believed her to be dead and that the rigidity of the upper limbs indicated commencing rigor mortis; but this curious fact was related to me by a near relative that once before she had passed into a death-like state, with similar symptoms, even to the rigidity of the arms and hands, from which state she had recovered, and after which she had always experienced the direst apprehension of being buried alive. Her anxiety, it will be easily conceived, was readily communicated to her relatives, who urged me to leave nothing undone for determining whether life was or was not extinct. Under the circumstances I suggested that Dr. (now Sir) Benjamin Ward Richardson, who has made the proofs of death a special study, should be summoned. He soon arrived and submitted the body to all the tests in the following order, each test being written down at the moment by myself: 1. Heart sounds and motion entirely absent, together with all pulse movement. 2. Respiratory sounds and movements entirely absent. 3. Temperature of the body taken from the mouth the same as that of the surrounding air in the room, 62° F. 4. A bright needle plunged into the body of the biceps muscle (Cloquet's needle test) and left there shows on withdrawal no sign of oxidation. 5. Intermittent shocks of electricity at different tensions passed by needles into various muscles and groups of muscles give no indication whatever of irritability. 6. The fillet-test applied to the veins of the arm (Richardson's test) causes no filling of veins on the distal side of the fillet. 7. The opening of a vein to ascertain whether the blood has undergone coagulation shows that the blood was still fluid. 8. The subcutaneous injection of ammonia (Monte Verdi's test) causes the dirty brown stain indicative of dissolution. 9. On making careful movements of the joints of the extremities, of the lower jaw and of the occipito-frontalis rigor mortis is found in several parts. Thus of these nine tests eight distinctly declared that death was absolute; the exception, the fluidity of the blood, being a phenomenon quite compatible with blood preternaturally fluid and at a low temperature, even though death had occurred. 10. There now remained the diaphanous test, which we carried out by the aid of a powerful reflector lamp, yielding an excellent and penetrating light. To our surprise the scarlet line of light between the fingers was as distinct as it was in our own hands subjected to the same experiment. The mass of evidence was of course distinctively to the effect that death was complete; but, to make assurance doubly sure, we had the temperature of the room raised and the body carefully watched until signs of decomposition had set in. I made a visit myself on a succeeding day to assure myself of this fact.

The results of these experimental tests were satisfactory as following and corroborating each other in eight out of ten different lines of procedure; but the point of my paper is to show the utter inadequacy of the

\*From *The Lancet*.

diaphanous test, upon which some are inclined entirely to rely. Sir Benjamin Richardson has reported an instance in which the test, applied to the hand of a lady who had simply fainted, gave no evidence of the red line; she therefore, on that test alone, might have been declared dead. In my case the reverse was presented; the body was dead, while the red line, supposed to indicate life, was perfectly visible. Hence the test might possibly lead to a double error and ought never of itself to be relied upon.

It is a question worthy of consideration whether the coloration observed was due to the fluid state of the blood after death; it is not unreasonable to suppose so, but I prefer merely to offer the suggestion without further comment.

#### Uva Ursi and Sweet Spirit of Niter.

The following example of a common prescription incompatible involving the decomposition of a fluid extract rich in gallic acid by spirit of nitrous ether was brought before the members of the California Pharmaceutical Society at a recent meeting.

|                            |       |
|----------------------------|-------|
| Sp. ætheris nitrosi.....   | 3 i   |
| Ext. fl. buchu.....        |       |
| Ext. fl. uva ursi, ss..... | 3 li  |
| Aqua.....                  |       |
| Syrupi, aa.....            | 3 iss |
| M. ft. mist.               |       |

The mixture evolves nitrous fumes, and the consequence of corking the bottle at once may be an explosion. An investigation of the constituents of the mixture showed that neither the water, the syrup nor the fluid extract of buchu had anything to do with the decomposition. The fluid extract uva ursi, then, was the cause of the formation of nitrous gas. A few experiments with the leaves (which are in some countries used for tanning leather) showed that pure tannin had no effect upon spirits of nitrous ether, but when the latter is brought into contact with gallic acid, one of the principles contained in uva ursi leaves, an evolution of nitrous gas is the result.

#### Tincture of Myrrh in Diphtheria.

Dr. Ströhl of Munich (*Mediz. Zeit.*) recommends the use of myrrh in diphtheria as follows:

|   |             |
|---|-------------|
| Tincture of myrrh.....                  | 4 gramme    |
| Glycerin.....                           | 8 grammes   |
| Distilled water sufficient to make..... | 300 grammes |

This mixture should be administered every hour during the day and every two hours at night. For children up to two years old a coffee spoon is a dose, up to fifteen years old a dessertspoonful, and for adults a tablespoonful should be given. Local treatment is not necessary, though it is advantageous to gargle with 0.5 per cent. chloroform water. After several days the resin will appear in the urine, but it can be distinguished from albumen by its solubility in alcohol. Ströhl finds a notable increase of the leucocytes to follow this treatment. The treatment should be stopped on the appearance of renal colic.

#### Transmission of Cholera by Means of Flies.

It has been proved that tubercle bacilli are found in the excreta and bodies of flies that have been feeding on phthisical sputa, and it has been suggested that it is possible for tuberculosis to be spread by these means. In the *Centralblatt für Bakteriologie und parasitenkunde*, Band xii., p. 25, is a communication from Dr. Sawtschenko, who has found that cholera bacilli possessing all their virulent properties can be demonstrated for at least four days in the intestinal canal and dejections of flies that have been feeding on the stools of cholera patients or on the intestinal contents of those who have

died from the disease. He also produces evidence to show not only that the bacilli pass through the intestinal tract of flies, but also that during the passage actual multiplication takes place. It is likewise an interesting fact to observe that the longer the interval of time which is allowed to elapse between the period of infection and the examination of the dejecta the smaller is the number of saprophytic organisms present and the larger that of the cholera bacilli. Control experiments were made with flies which had been prevented from incurring chance inoculation, and negative results followed. Dr. Sawtschenko, therefore, is of opinion that flies may act not only as carriers of the morbific agent of cholera, but also as hosts of the bacilli.

**Local Anæsthesia.**—Hacker, in his lectures, quoted from Schleich, at the last surgical congress, on the "so-called infiltration-anæsthesia," remarking that this was a very plausible theory whereon a reasonable explanation could be advanced in favor of many local applications for surgical operation. Common salt, when thrown into the intercellular tissue, will produce such a diffuse effusion that any kind of cutting may be undertaken without pain. This preparation (in a 0.2 per cent. solution) with a very small quantity of cocaine will make an excellent anæsthetic, and one that Hacker frequently uses, in the form of

|                      |     |
|----------------------|-----|
| Aque destill.....    | 100 |
| Cocaine.....         | 0.1 |
| Sodium chloride..... | 0.2 |

Injections with this solution must be used several times to produce the necessary œdema, after which a painless operation may be undertaken. If the insertion of the needle is to be made painless, it may be previously treated with ethylchloride.—*Medical Press.*

**Salol Gargle.**—Seifert (*Centralb. f. Klin. Med. Quar. Ther. Rev.*) confirms Georgi's favorable report. He used salol as a wash or gargle in ulceration of the tongue, stomatitis, angina, and diphtheria, first dissolving six parts of salol in one hundred of spirit, and then adding a dessertspoonful of this solution to a glass of warm water. Seifert also used salol as a powder for insufflation, but he finds it less beneficial than iodol, because, though antiseptic and non-irritating, it does not adhere sufficiently well to mucous membranes and ulcerated surfaces.

**Peroxide of Hydrogen against Cholera.**—Dr. Elmer Lee, of Chicago reports in the *Clinical Review* of that city that in his experience Marchands Medicinal peroxide of hydrogen proved a better antiseptic than any other drug heretofore known in the treatment of cholera. He administered the remedy in the form of a 4 per cent. solution in water, in cupful doses, at intervals of two hours during the sickness.

**Dyspepsia.**—Dujardin-Beaumetz recommends the following:

|                       |      |
|-----------------------|------|
| Bismuth subnit.....   |      |
| Magnesi sulph.....    |      |
| Crete preparat.....   | 3 li |
| Sodii phosphatis..... |      |

M. Div. in pulv. No. xi.

Sig. One after each meal.

**Antidotes to Cocaine.**—As prophylactics against the untoward effects of cocaine, quinine and other antipyretic remedies should be given before its administration. Ammonia nitrite of amyl and ether inhalations to keep up respiration are regarded as the best antidotes.

**Cimicifuga.**—Ten to thirty drops of the fluid extract after meals cures seminal emissions.—REED

# News and Notes.

## Pharmaceutical Association Meetings.

### MONTHLY CALENDAR.

| Date.     | Association.        | Place of Meeting. |
|-----------|---------------------|-------------------|
| Aug. 8... | Montana .....       | Helena.           |
| " 8...    | North Dakota.....   | Fargo.            |
| " 8...    | Wisconsin .....     | Fond du Lac.      |
| " 9...    | North Carolina..... | Greensboro.       |
| " 10...   | Georgia.....        | Rome.             |
| " 10...   | Illinois.....       | Chicago.          |
| " 14...   | A. P. A.....        | Chicago.          |
| " 15...   | South Dakota.....   | Yankton.          |
| " 21...   | Int. Congress.....  | Chicago.          |

## Oregon Association.

The members of the Oregon State Pharmaceutical Association came together in annual convention on June 2, and the proceedings were opened with a good deal of enthusiasm. The day was devoted mainly to preliminary business of a routine character. On the second day reports of standing committees were taken up and L. G. Clarke, chairman of the legislative committee, made an exhaustive report of the work done by his committee. He stated that their efforts to amend the pharmaceutical law passed by the last legislature had been successfully offset by the opposition of the medical fraternity. Acting upon Mr. Clark's report, the association decided to try the same amendments at the next session. In the absence of D. P. Mason, chairman of the committee on trade interests, D. J. Fry, a member of the committee, made a verbal report, which was accepted. W. P. Smith, chairman of the committee on membership, reported the addition of six new members. They are L. C. Brosius, of Hood River; L. L. Tollman, of Pendleton; A. J. Hodges, of Albany; Mr. Breckenfield, of Portland; J. H. Brooks, of Salem, and E. E. Cable, of Salem.

The special committees reported favorably upon the reports of the president, secretary, treasurer and H. D. Dietrich, who was delegate to the American Pharmaceutical Association last year. Then a number of queries were answered by W. I. Cattel. During the afternoon session E. D. Oesch, of Portland, read an interesting paper descriptive of the life and trials of a druggist. Dr. Pfluger, chairman of the World's Fair Committee, reported that a collection of roots, herbs and other medicinal flora of the State had been prepared under his supervision and forwarded to Chicago. The election of officers for the ensuing year then took place with the following result: President, L. G. Clarke, of Portland; vice-presidents, G. L. Blackman and A. W. Allen, of Portland, and L. L. Tallman, of Pendleton; secretary, H. D. Dietrich, of Portland; treasurer, W. A.

Thomson, of Portland; executive committee, George C. Blakely, of The Dalles; A. R. Ockerman, of Portland; A. J. Hodges, of Albany; Dr. F. C. Brosius, of Hood River; Julius Heubner, of Portland; L. W. Guiss, of Lafayette, and R. A. Wilson, of Portland. G. C. Beakeley, of The Dalles, was elected delegate to the annual meeting of American Pharmaceutical Association to be held in Chicago, during August. The association paid a high compliment to the retiring president, Dr. Pfunder, and had considerable fun over it. They trumped up a charge against him, and after a short trial, during which he was too confused to speak, presented him with a huge bunch of magnificent roses as a penalty. Portland was chosen as the place of meeting for 1894, and the time, some time during the industrial exposition, the exact date to be set by the president.

## Michigan Association.

June 19 to 22 inclusive were days devoted to the eleventh annual meeting of the Michigan Pharmaceutical Association, and it proved the most delightful in the history of the organization. The Star Island House, St. Clair Flats, 30 miles from Detroit, was the meeting place, and Monday's boats brought thither a party of druggists and their womenfolk, who were destined to leave Thursday morning after one of the most charming outings of their experience. The first business session was held on Monday evening wherein was transacted the usual routine work—brief address by the president, S. E. Parkill, reports of committees, election of new members, and miscellaneous business. A most interesting, and valuable report from the chairman, C. C. Sherrard, of the committee on adulterations, so pleased the gathering that he was made the recipient of a special vote of thanks. There were present a dozen members of the graduating pharmacy class of the University of Michigan (two ladies among them) and of the Alumni Association of the Pharmacy Department, specially invited to hold their reunion with the Pharmaceutical Association and participate in its privileges.

Tuesday morning the whole party boarded a commodious steam yacht and after a half hour's sail anchored in the lower bay, and while the ladies were transferred to rowboats and sent off fishing, the men, every one, gathered around Prof. Prescott, and spent a couple of hours listening to many papers of practical bearing presented by members of the graduating class. When the ladies returned, the most successful ones were awarded prizes for their prowess, the anchor hoisted and the party returned to the hotel.

The third session was held Tuesday

afternoon on the lawn, and was mainly devoted to the reports of committees and the secretary and treasurer. It had been found possible to discharge the expenses of both last and this year's meetings, and in all probability show a very respectable balance, and no debts before the opening of 1894. Heretofore the annual reports of secretary and treasurer showed only the expenses up to but not including the current meeting, and the cash balance reported was frequently very greatly decreased a few days after adjournment. More papers were read, and excellent discussions filled in a practical and profitable session.

Tuesday evening the party was augmented by a yacht load of 40 or 50 from Mt. Clemens, and several hours were spent in dancing and a good time generally.

Wednesday morning, the last session, saw the election of officers, resulting in the choice of president, A. B. Stevens, Ann Arbor; vice-presidents, J. E. Peck, Grand Rapids; E. T. Webb, Jackson; A. S. Parker, Detroit; treasurer, Wm. Dupont, Detroit; secretary, F. A. Thompson, Detroit.

Votes of thanks to Local Secretary James Vernor, and to the wholesale and retail druggists and others who had contributed to the pleasure of the meeting, were followed by reading and discussing the most valuable report on trade interests that the association has ever received. Chairman John E. Peck, of the committee, in this report succeeded in very thoroughly animating the members, and the discussion was spirited and meaty. After deciding to leave the date and next place of meeting to the choice of the executive committee, the association adjourned *sine die*.

The amusement features were most enjoyable. In addition to the magnificent sail from Detroit to the Flats, and the entertainments already mentioned, the fullest facilities of the hotel were at the free service of the guests. Boats, fishing, billiards, bowling, etc., brought into pleasant strife the entire party, and prizes were supplied by F. E. Ingram & Co., E. W. Lightner & Co., Williamson Mfg. Co., some cigar houses and others to reward the victors. Wednesday a trip to the Oakland, at St. Clair, a fine dinner when there, followed by a visit by steamer to the salt manufacturing establishments under the guidance of a committee of St. Clair druggists, was followed by return to Star Island. Here, Wednesday evening, a tasty banquet was the attraction for 140 people, who listened later to this programme of toasts: "The Alumni Association," Geo. Wagner, Ann Arbor; "The Country Druggist," S. P. Whitmarsh, Palmyra; "What I Don't Know," C. C. Sherrard, Detroit; "Doctor and Druggist," Geo. J. Ward, St. Clair; "Our Association," S. E. Parkill, Owosso,

and a few short addresses from A. B. Stevens, A. Bassett, C. W. Parsons, and others, all under the direction of Toast-master James Vernor.

Thursday morning came the return sail to Detroit. By special invitation the boat stopped at Parke, Davis & Co.'s; the party was welcomed by music from the fine band of that house, and was escorted through the mammoth establishment, viewing with interest every detail of manufacture. Here, too, were enjoyed a tasty and appetizing lunch and an instrumental concert. Leaving the works, the Belle Isle Park wagons gathered in the crowd, carried them over the island's beautiful drives, stopping for an inspection of the Michigan Yacht Club's elegant house, and landed them on the ferry dock for the return to the city. Thus ended a meeting excelling in interest, value of reports and papers, and attractiveness of amusement programme, any of the association's previous efforts.

### New York State Association.

The association met in the parlors of the New Kent House, Lakewood, on Chautauqua Lake, on Tuesday afternoon, June 27, at 2.30, for its fifteenth annual convention.

President W. L. DuBois, of Catskill, after calling the meeting to order, introduced Rev. Charles C. Albertsen, of Jamestown, who invoked the Divine blessing upon the deliberations of the association.

Mayor Price, of Jamestown, was then introduced and extended the courtesies of Jamestown and Lakewood in a few well chosen sentences.

This address was suitably responded to by Dr. Alfred B. Huested, of Albany, president of the State board of pharmacy.

The names of thirty applicants for membership were read and posted to be acted upon at a later session of the association.

After the transaction of some routine business of minor importance the session adjourned subject to the call of the president.

The second session was called to order at 3 o'clock on Wednesday afternoon. The attendance was increased by the arrival of a number of members who had been delayed. Among them were: Plin S. McArthur, W. H. Clare, Nat McEachen, C. O. Rano, V. Mott Pierce, R. K. Smither, Joseph Schorp, John S. Barnes, Thomas B. Carpenter, W. C. Nichols, and E. J. Fleury, of Buffalo; W. Coon and A. H. Brownell, of Olean; Wm. H. McGarrah, of Scranton, and E. J. Burrows and J. P. Jones, of New York.

President W. L. DuBois, of Catskill, read his annual address, in which he dwelt upon the advantages which are conferred upon pharmacists by membership in the association and upon the good work which had been accomplished by the organization. Referring to the lamented death of the late Professor P. W. Bedford, the first president of the association, he suggested that a committee be appointed to draft and present to the family of the deceased a suitable memorial as a testimonial of the sincere grief and sorrow of the association at his loss. The address also contained a number of other suggestions, all of which were referred to a committee composed of Messrs. Rano, Huested and Rogers.

Some thirty applications for membership were favorably acted upon.

The reports of the secretary, the treasurer and the committee on adulterations were read by title and referred for publication, a vote of thanks being extended Dr. R. G. Eccles, of Brooklyn, the chairman of the committee named, for the report.

The report of the committee on credentials was presented and the delegates from various local and sister organizations welcomed.

A communication from James H. Hutchins, of New York, of the committee on new remedies, and one from Oscar Oldberg, of Chicago, concerning the seventh international congress of pharmacists, to be held at Chicago in August, were read and filed.

Reports from several committees were presented and took the usual course.

F. S. Hubbard, of Buffalo, offered a resolution that all members in arrears for three years be dropped, if after notice they had not paid up on or before August 1, which resolution was concurred in.

Dr. A. B. Huested, of Albany, C. S. Ingraham, of Elmira, and R. K. Smither, of Buffalo, were appointed a committee to consider various suggestions which had been offered as to the best means of promoting a more active interest in the association among the pharmacists of the State.

The election of officers was then proceeded with, and resulted in the selection of: President, Charles O. Rano, Buffalo; first vice-president, A. S. Van Winkle, Hornellsville; second vice-president, Isaac C. Chapman, Newburg; third vice-president, Arthur Brooks, Ithaca; secretary, Clay W. Holmes, Elmira; treasurer, W. B. Fuller, Syracuse; executive committee, F. S. Hubbard, Buffalo; R. K. Smither, Buffalo, and C. S. Ingraham, Elmira.

The following committee was appointed to select names to present to the governor from which to select one to fill the vacancy occurring on the board of pharmacy caused by the expiration of the term of office of Dr. A. B. Huested: George H. Russell, Syracuse; Isaac C. Chapman, Newburg; and C. S. Ingraham, Elmira.

After the adjournment of the session the committee on legislation had a conference with a delegation from the Woman's Christian Temperance Union, with a view to formulating some form for licenses for pharmacists which would be mutually agreeable to the pharmacists and the W. C. T. Union. No definite plan was agreed upon.

An evening session was provided for, but reconsidered, and the evening was devoted to dancing, in which quite a number of Jamestown people participated.

The third session convened on Thursday morning at 10 o'clock, the first business transacted being the presentation of a proposed change in the by-laws, which was acted upon later.

Dr. A. B. Huested, as chairman of the committee on plans for increasing the interest of the members of the association, submitted a report recommending that Saratoga Springs be selected as a place of meeting for 1894, and that it be recommended as a permanent place of meeting. It was also recommended that persons of note be secured to deliver special addresses before the association; that full itemized programmes of both the scientific and social features of each meeting be prepared and distributed prior to the meeting of the association, and that the secretary be instructed to correspond with each county or-

ganization with a view to securing at least one member to attend the annual meetings.

This report was accepted and adopted, all save the last section, on which action was suspended.

The report of the committee on conference with the delegates from the Woman's Christian Temperance Union was presented and adopted. The committee of the W. C. T. U. agreed to submit drafts of proposed legislation on the subject of sales of narcotics and intoxicants to the legislative committee of the New York State Pharmaceutical Association.

The committee appointed at the last session presented the following names to be recommended to the Governor from whom to appoint a member of the State board of pharmacy to succeed Dr. A. Huested, of Albany, whose term expires this year: A. B. Huested, of Albany; Chas. H. Gaus, of Albany; W. L. Dubois, of Catskill; Jas. A. Barkhuff, of Amsterdam, and Chas. T. Fish, of Saratoga Springs. Dr. Huested asked to have his name removed from the list as after nine years' service he felt that it was fit that he should retire from the service. Eloquent tributes to Dr. Huested's worth were made by W. H. Rogers, of Middletown, and Clay W. Holmes of Elmira.

A special committee was appointed to draft suitable resolutions of regret expressing the great loss sustained by this association and by pharmacy in general by the death of the late Prof. P. W. Bedford.

R. K. Smither, of Buffalo, presented resolutions condemning the passage of special legislation such as was enacted at the last session of the legislature which still further extended the limit which was set for the registration of persons who are in business without examination.

The by-laws were amended by changing the constitution of the committee on commercial interests so that it is to be composed of a general chairman and one committeeman in each county.

A discussion of the condition of trade in each county was entered into. C. S. Ingraham reported that there was a satisfactory condition of affairs in Chemung county. Messrs. Van Winkle, of Hornellsville, Hatch, of Jamestown, Russell, of Syracuse, Rogers, of Middletown, all reported on the local conditions of trade in their several sections.

The installation of officers then took place. The president appointed R. K. Smither, of Buffalo, chairman of the committee on commercial interests. He also appointed the legislative committee as follows: C. O. Rano, of Buffalo, A. B. Huested, of Albany, W. H. Rogers, of Middletown, Isaac C. Chapman, of Newburg, and R. K. Smither, of Buffalo, after which the association adjourned to meet at Saratoga at a date to be selected by the executive committee.

During the sessions a total of 41 new members were added to the list.

In the afternoon the members and their families sailed up the lake to the Chautauqua assembly grounds and returning in the afternoon they dispersed to their several homes, though some remained over at the Kent House, while others continued on to Chicago.

There were during the entire meeting forty-one new members elected, among whom were: Theron R. Lawrence, Pough-

keepsie; R. A. Austin, Cairo; James B. Booth, Syracuse; Alfred A. Mitchell, F. B. Carwell, Brooklyn; H. E. Kirk, W. E. Wolfe, Bernard Chrenfreund, Buffalo; H. C. Geisler, Fulton; Charles F. Skinner, Myron Puff, W. B. Odell, Poughkeepsie; John C. Krieger, Salamanca; Charles E. Mills, Belmont; H. S. Teeple, Wellsville; Asa S. White, Courtland; Charles B. Wheaton, Delhi; Alfred M. Palmer, Olean; John Nelzmler, Ithaca; Glenn D. Gorton, E. C. Ferguson, D. B. Quigley, Charles D. Terbell, Corning; John M. Winnberg, Clarence W. Thompson and Elmer E. Wellman, Jamestown; Daniel J. Wood, Amsterdam; W. S. Millener, Holly; Joseph Schorp and Walter C. Nichols, Buffalo; Wm. B. Coon, Olean; Wm. R. Joseph, Buffalo, and S. H. Carragan, Brooklyn.

**LYNN DRUGGISTS' ASSOCIATION.**—The following members of the Lynn, Mass., Druggists' Association participated in the annual meeting and outing on June 27: Warren Toppan, C. A. Charles, J. B. Small, J. W. Chase, Dr. C. D. S. Lovell, J. M. Harriman, J. S. Barry, Frank Berridge, A. D. Faulkner, H. M. Maxwell, C. H. Perry, Boston, T. P. Ford, E. A. Bessom, J. W. Colcord, S. H. Holbrook, F. S. Merritt, J. M. Nelson, P. S. Decoster, W. F. Craig, S. P. Kenyon, C. H. Buckley, C. H. Fields, G. L. Watson, and F. W. Wilder.

The party had a game of baseball, and dinner, after which the business meeting was held. The report of Secretary and Treasurer C. A. Charles was read and approved. Officers were then elected as follows: President, Eugene A. Bessom; vice-president, Joseph W. Colcord; secretary and treasurer, William F. Craig; standing committee, Warren Toppan, S. Harding Holbrook, Arthur A. Stinson, Alonzo D. Faulkner, James S. Barry.

**NEW YORK SOCIETY OF APOTHECARIES.**—The members of this society came together in special meeting at the call of the president on June 28. The objects of the meeting were to raise funds for the liquidation of a debt contracted by the entertainment committee and to inquire into statements made in the columns of the *DRUGGIST AND RECORD* with regard to the conduct of the presiding officer when acting in his official capacity. At the request of the president, T. E. Fraser addressed the meeting, referring in general terms to the article, which he considered an unkind reflection on the society, and said he had been spoken to on the subject by a number of druggists both members and non-members of the society. Mr. Schnurrer then read the article complained of, which was a mere news note, and remarked that he also had been approached by different persons, thus testifying to its wide circulation. As none of the members present saw fit to propose a motion looking to a protest against the report, the president gave up the chair to Mr. Lascar and made his grievance a personal one, again requesting the meeting to take some action. He suggested that a letter be drawn up embodying a request for an explanation of the objectionable paragraph, but no further action was taken. The payment of a bill for printing was then made a special order, and after the reasons for its non-payment up to date were made clear the members present made up the entire sum, amounting to \$48.63, by voluntary sub-

scription. This brought the proceedings to a close, and the meeting adjourned to Wednesday, July 5.

**THE RHODE ISLAND PHARMACEUTICAL ASSOCIATION** will hold its semi-annual meeting in Providence on Wednesday, July 12. The meeting will be held in the rooms of Westminster Lodge, I. O. O. F., No. 248 Weybosset street, and will be called to order at 2.30 o'clock P.M., or on adjournment of the Mortar and Pestle Club.

Every member is urged to use his utmost endeavor to be present at this meeting. It is expected that several papers will be read, and there is every prospect of a cordial and instructive meeting.

Following the meeting there will be a collation. For further information address the secretary, William E. Cates, Providence.

### Meetings of Boards of Pharmacy.

#### JULY.

- 4, Iowa—Davenport, Bloomfield, Oskaloosa and Des Moines.
- 4, Oklahoma—Oklahoma City.
- 6, South Dakota—Sioux Falls.
- 10, District Columbia—Washington.
- 10, Illinois—Chicago.
- 11, Missouri—Sedalia.
- 11, California—
- 12, West Virginia—Huntington.
- 12, Kentucky—
- 13, Minnesota—
- 13, South Carolina—
- 20, New Jersey—Newark.
- 20, New Hampshire—

**NEW YORK STATE BOARD OF PHARMACY.**—The next examinations by this board will be held on September 1 and December 1, at Albany, Rochester, Syracuse and Yonkers.

**WISCONSIN BOARD.**—At the meeting held at Wausau on June 22 certificates were granted to the following, who passed the examination in other States: Thomas D. Rowe, Florence; S. H. Newton, Oshkosh; G. A. Worm, Princeton; M. L. Olander, West Superior; F. C. Homer, Hudson; F. F. Champlain, Stanley; Gust. Evenden, Amery; B. C. Werner, Black River Falls. Licentiate or first grade certificates were granted to R. P. Thiele, Shawano; Ed. Hahn, Milwaukee. Assistant or second grade were granted to Otto E. Smith, Janesville; Charlotte Falk, Bayfield; F. H. Brown, Mineral Point; W. R. Roller, Milwaukee; J. M. Sieger, La Crosse; J. M. Sexton, Marshfield; G. A. Jones, Waukesha. Eight applicants were rejected. The next meeting for examination will be held at Fond du Lac August 11.

### Recent Drug Fires.

J. T. Zimmerman's store at Leipsic, Ia., \$3,000 and residence \$5,000, no insurance—Murray & Nickell, Law avenue and Polk street, Chicago, drug mills, one workman's life lost, damage to stock \$10,000—W. C. Moody & Co.'s store at Fort Worth, slightly damaged—P. B. Moriarty's store at Worcester, Mass., no damage—W. P. Sheldon's store at Malden, Mass., damage \$50—An explosion of gasoline in Michael Levin's store at 207 St. Joseph street, Rochester, N. Y., caused a destructive fire—A. W. High's store, Henrietta, Tex., loss \$3,500, insurance \$2,750—The Sylvan Remedy Co., Peoria, Ill., damage \$8,000—Kirksey & Osborne's store at Pickens, S. C., loss not given—

Fire broke out in the basement of the drug store in the new post-office building at Americus, Ga., on June 19. The entire loss is estimated at \$10,000.

The Murray & Nickell drug milling plant located on West Polk street, Chicago, suffered largely by fire on June 23. The flames spread so rapidly that four or five of the employees were seriously injured before their escape from the building. The fire originated on the east side of the building, on the second floor, from some unknown cause. The entire milling department, which takes in the east half of the building, and all of the machinery, is almost a total loss. The building was a five-story structure with a frontage of eighty feet on Polk street and sixty-five feet on Law avenue. A. F. Murray, one of the members of the firm, said the loss on the plant would be almost total. The machinery and stock were valued at about \$35,000 and was insured for about 80 per cent. of that amount.

### OBITUARY.

#### CHARLES B. LLOYD.

Charles B. Lloyd, president of the Brunswick, Ga., State Bank, and senior member of the large wholesale and retail drug house of Lloyd & Adams, died in his apartments at the Oglethorpe Hotel, Brunswick, Ga., on June 26th. Mr. Lloyd was but thirty-three years old, a native of Georgia. He went there twelve years ago, and by push, energy and enterprise he had attained one of the most prominent positions in local business circles. Unfortunately his ambitious nature led him to make hazardous speculations, which coupled with the prevailing money tightness, resulted in the failure of the institutions at whose helm he was, and which are still in the hands of temporary receivers. Mr. Lloyd's social standing was on a par with his business position. He was one of the leading spirits in all social entertainments. He belonged to the Brunswick Club (local Pickwick). He leaves a young wife to whom he has been married but five months.

**FRANCE** is soon to adopt an interesting innovation in the postal card system. The cards will be issued in the form of check books, with stubs. The sender of the postal card can make a memoranda of its contents on the stub, and can have this stamped at the Post Office before the card is detached, so that a verified record of the correspondence can be kept.

While the salicylates answer all purposes in acute rheumatic fever, they are of little value in the non-febrile forms. Two such cases have been under my care during the past Winter. As long as they took sodium salicylates in full doses, the symptoms were reduced to a minimum, but immediately returned on the discontinuance of the drug, which, moreover, had a deleterious effect on the health. I then directed these patients to take the solution of strontium iodide (Paraf-Javal) beginning with four drachms daily. Improvement followed, and the dose was gradually reduced to one-half. The effect was very good, the symptoms gradually subsiding while the general health improved. Both patients resided in damp houses, and the rheumatism showed a tendency to recurrence, though at intervals much longer than when under the salicylates—WAUGH, *The Times and Register*.

## Review of the Wholesale Market.

NEW YORK, July 5, 1893.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

Although the market for drugs, dyestuffs and chemicals during the month of June was depressed and the business lacking in important demand values ruled fairly steady and the fluctuations were few and unimportant. Momentarily jobbers and consumers appear to be limiting their orders to actual necessities, the monetary stringency promoting extra caution in speculative circles. The jobbing and importing houses anticipate a material increase in trade proportions during the present month, and some speculative interest is expected to develop. Prices are maintained firmly upon most lines.

### DRUGS.

ALCOHOL is maintained steadily by the trust managers at \$2.18 @ \$2.22 less the usual rebate.

BALSAM COPAIBA, Central American, is well sustained from the hands of importers at 31c., and it would be difficult to shade this price even for quantities.

BALSAM FIR, Canada, has declined and now offers at \$2.50.

BALSAM PERU remains quiet and may be obtained down to the point of \$1.35.

BALSAM TOLU continues dull. Small lots can be obtained in instances at 20 @ 20½c., but the price at first hand is 22c.

BARKS have remained practically unchanged during the week. Small lots of buckhorn, cascara and soap are moving at quotations.

BUCHU LEAVES, short, meet with some little attention, and the market is well sustained at the range of 12 @ 15c. as to quality.

CANTHARIDES are not inquired for to any extent, though holders are quite free to offer. Chinese may be obtained in case lots at 28 @ 30c. and Russian 70 @ 75c.

CACAO BUTTER is moving out freely to consumers. We are reported sales of 2,000 lbs. Dutch bulk at 21½c.

CASSIA BUDS are held firm at the advance to 18c., and jobbing sales are said to have been made up to that point.

CHAMOMILE FLOWERS, New German, are in moderate inquiry, but most buyers evince caution in purchasing, looking forward to more abundant supplies. The quotation stands 23 @ 25c.

CUBE BERRIES are nominally unchanged with an absence of important demand.

CUTTLE BONE, Trieste, has been in better demand of late and is maintained at 12½c., though inferior grades are being pressed upon the market, and down to 11c. is quoted as acceptable.

ERGOT is in better demand and the tone of the market is stronger. Holders are looking for an advance as the result of stronger advices from primary sources. Best Spanish is held up to 45c., though prime grades can yet be obtained at 39 @ 40c. German offers at 33 @ 35c.

GUARANA, new arrival, is offering at \$1.05, but little interest is manifested and the demand is limited to small and unimportant quantities.

INSECT POWDER is in steady fair request, with fresh sales reported of 50 kegs at the range of 16 @ 18c.

LYCOPodium is on the down grade with the range quoted 51 @ 53c. as to brand, the latter for Politz.

MENTHOL is easier though not quotably lower. The range of the market is \$3.60 to \$4.25, the latter for Cocking's.

OPIMUM.—Speculative interest in opium has been checked to a certain extent of late by a weak market and freer offerings. The uncertainty regarding crop prospects is an important factor in the present unsettled condition of the market. The statements of a Constantinople correspondent in his regard will be interesting. Writing under date of June 15, he states:

"The business transacted on this market during the past fortnight amounts to about 50 cases *Druggists'* sold to native speculators at up to 11s. 3d. f.o.b. and 10 cases *Zille talequale* at 11s. 9d. f.o.b. The drought which has prevailed in the interior up to the present has had a disastrous effect on the Spring plants, some persons going so far as to say that they are totally destroyed. Rain has now fallen, but too late to prove of any benefit except to the Autumn sowings, for which serious apprehensions had begun to be held. The market is now firm at about 11s. 3d. f.o.b. for *talequale*, and the fact that United States buyers have again appeared in Smyrna after a prolonged "holding off" may further reassure holders. Our estimate of the crop is 2,500 to 3,000 cases maximum, probably less. In all likelihood prices will be constantly on the move either one way or the other until the actual output is ascertained."

Recent cables from Smyrna advise sales at 11s., and the tendency is still downward. In this market quantities are obtainable at \$2.42½ @ \$2.45, but there is no inquiry for round parcels. Single cases are quoted \$2.50 and jobbing lots \$2.55 @ \$2.60. Powdered continues to offer at \$3.45 @ \$3.50.

QUININE has not changed materially during the week. There has been a fair inquiry with business in foreign brands to the extent of some 10,000 ozs., for which 18½ @ 18¾c. was paid as to brand and quantity. The above range was quoted for additional on quantities and the market closed firm on that basis. Manufacturers yet hold aloof, declining to entertain orders below their agreed upon price of 20c.

SAFFRON, American, continues to offer down to 30c., though only jobbing parcels are held upon this basis, bales being held at 35c.

SENNAS are passing out quite actively to consumers at the range of 8 @ 20c.

SOAP, Conti's white, has continued in demand at quotations.

TONKA BEANS, Angostura, have been in good demand during the week and sales are reported of some 10,000 to 20,000 lbs. at \$1.65 @ \$1.70. The lowest open quotation is now \$1.75, while some holders are asking up to \$2. The market closed firm at the advance.

VANILLA BEANS are maintained with firmness and a good jobbing trade is reported. We are reported sales of 25 cans whole beans, medium to prime grade at \$8 @ \$11.

WAX, Japan, is now offered at 8c., but this figure appears to be above the ideas of most buyers, who offer 7½c. The market is hardening.

### DYESTUFFS.

CUTCH continues inactive with the nominal range for SM 4½ @ 5c. as to quantity. The inside price can be shaded for parcels in transit and forward shipment.

GAMBIER is quiet, with the tone of the

market easy. From wharf 4.10c. @ 4.15c. is quoted as acceptable. From store offers to sell quantities have been made at 4.15c. though the general asking price is 4¼c. up as to quantity.

MADDER Dutch, continues scarce. We quote the range at 10 @ 15c.

NUTGALLS have remained quiet, but the quotations of the market have not varied from 13 @ 13½c. for China and 14 @ 14½c. for Blue Aleppo.

SUMAC, Sicily, comes higher from primary sources, the market being influenced by reports of failure of the new crop and exhaustion of the old. The market here is not affected, however. A limited jobbing business has been transacted at the range of \$72.50 @ \$77.50.

TUMERIC is held at full previous prices.

### CHEMICALS.

ACETATE OF LIME remains quite at nominally unchanged quotations.

ARSENIC, white, is selling in moderate quantities at the range of 3½ @ 3¾c.

BLEACHING POWDER is given very little attention, but present prices are regarded as low, hence supplies are not urged at any concession.

BLUE VITRIOL is offered sparingly at 3½ @ 3¾c. The tendency of the market is regarded as better.

BORAX is inquired for but the demand is slow and of meagre proportions and prices are nominally unchanged.

BRIMSTONE, crude, is not inquired for to any extent. The nominal spot price for seconds \$19.50 and to arrive and shipments \$19.25.

BROMINE has advanced and is now quoted at 41 @ 45c. as to quantity and the current sales which are limited are at this range. The bromide salts have advanced in sympathy. Potash in bulk now quoted 33 @ 34c. as to quantity, ammonium 43c. and sodium 48c.

CHLORATE OF POTASH continues dull with the nominal price of crystals 16c.

CITRIC ACID is in moderate demand and manufacturers' quotations appear to be fairly well sustained, say upon the basis of 44½c. for bbls. and 45c. for kegs.

CREAM TARTAR from second hands may be had at 19½c. for crystal and 20c. for powdered.

NITRATE OF SILVER has been reduced 3 cents per ounce, making the quotations 50 @ 51½c. the inside price for lots of 1,000 ounces.

NITRATE OF SODA continues dull but holders seemingly are not endeavoring to force the distribution at any concession from \$1.70 for quantities. To arrive and forward shipments are yet quoted at \$1.72½.

OXALIC ACID is held at full previous prices.

QUICKSILVER is maintained steadily at 54 @ 55c. and a moderate trade is reported at these figures.

SAL SODA, domestic, is held higher, manufacturers now quoting \$1.02½ @ \$1.05.

SULPHURIC ACID is without important change.

TARTARIC ACID is hardening, manufacturers quote 23½c. for crystals and 24c. for powdered.

## ESSENTIAL OILS.

ANISE has not varied during the week, being still offered at \$1.37½ @ \$1.40, but the market is firm at the figures quoted.

BERGAMOT is sustained at \$2 @ \$3 as to quality and brand.

CAYEPUT is not offered below 45c., though possibly a shade less could be done upon a firm bid for a quantity.

CASSIA is maintained firmly at 80 @ 85c. with the indications favoring higher values in the near future.

CLOVE is quiet, the current demand being confined to small and unimportant quantities. The quotation remains 55 @ 60c.

LEMON is in good demand, but buyers as a rule are unwilling to anticipate requirements upon the present basis of cost. Best brands quoted \$1.35 @ \$2.30.

OTTO OF ROSE remains rather quiet with sellers at \$6.50 @ \$7.25 as to brand and quantity.

PENNYROYAL is maintained steadily at \$1.50 @ \$1.70.

PEPPERMINT, HGH, is jobbing fairly at \$2.70 @ \$2.80, the former being an inside price for quantities. We are reported sales of 10 cases at \$2.75. Bulk is held at the range of \$2.45 @ \$2.65 as to quality. In Wayne County \$2.50 is being paid, a price equivalent to \$2.60 here.

SANDALWOOD, West India, is scarce and high. The general asking price is \$2.85.

SASSAFRAS continues quiet. Natural has been inquired for and there are sellers at 36c.

WINTERGREEN is meeting with some inquiry and is held at \$1.65 @ \$1.70 for natural and \$1.10 @ \$1.20 for artificial.

## GUMS.

ACACIA, sorts, are in fair jobbing demand at previous prices.

ALOES of the various grades continue

held at previous prices, but trade requirements are light. Curacao, of which there has been some further arrivals, is quoted 2½c.

ASAFETIDA continues dull, but prices are without quotable change; 12½ @ 17c. is asked as to quality.

CAMPHOR can be obtained in instances down to 48c. This from second hands who are cutting manufacturers' prices.

CHICLE can yet be obtained at 40c., but in view of the quantity here, buyers are inclined to proceed cautiously and supply immediate wants only.

GAMBOGE is well sustained at 55 @ 60c. as to quantity and quality.

GUAIAC and GEDDA are without important change; small sales of the former at 20 @ 23c., and 22 @ 24c. for the latter.

KINO is inquired for, and jobbing sales are making at 30c.

SENEGAL is dull but without quotable change.

SHELIAC is being offered with more freedom in this market owing to a lack of important demand. The prices asked are slightly easier. DC can now be purchased at 30 @ 31c.; VSO and SS, 27 @ 27½c.; octagon B (which is scarce), 28c.; T N 25 @ 25½c.; garnet, 22 @ 23c., and but-ton, 25 @ 28c.

TRAGACANTH is dull and unchanged.

## ROOTS.

ACONITE is passing out in small quantities to consumers at the range of 9 @ 14c. for German as to quality.

CALUMBA continues held at 6½ @ 11c., though important interest is lacking.

GINSENG is lower. For shipment to China the market is quoted \$2 @ \$3 as to quality. Among producing centers, New York State is quoted \$3, Minnesota \$2.40 @ \$2.50, and Illinois, Indiana and Ohio \$2 @ \$2.25.

GOLDEN SEAL, new crop, is being offered from the country with greater freedom, and down to 19c. f. o. b. there is quoted as acceptable. Here 22c. is asked.

IRECAC is cabled from London at 5 @ 6s. as to quality. This market is strong at \$1.30 @ \$1.35, with the tendency better.

JALAP is dull, but there is seemingly no pressure to realize below 21c. from importers and 22 @ 24c. from second hands.

SARSAPARILLA, Mexican, continues quiet, though there is no urgency to realize below the point of 8c. upon quantities.

SENEGA, Minnesota, is quiet, but spot goods are not offered below 53 @ 54c.

## SEEDS.

ANISE is without important change. Small sales at quotations.

CANARY, Smyrna, is finer though not quotably higher.

CARAWAY is steadily held at 5¾ @ 6c., though very little stock is at present moving.

CELERY is yet obtainable at 11¼c., though only jobbing lots are inquired for.

HEMP Russian, is maintained at 2¾c.

POPPY, blue, continues to offer at 8¾ @ 8¾c., though the import cost is said to be 9¾c.

RAPE is firm at 3¾ @ 3¾c. for German.

## An Unique and Valuable Trade-mark.

It is a noteworthy fact that Humphrey's Specifics are the only specifics or remedies that are bought, sold and called for by *Numbers alone*.

These numbers constitute a valid trade-mark, the value of which is so great that the Humphrey's Company are constantly called upon to defend their rights in the courts, which they do with much vigor, as numerous infringers can testify.

## Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted free of charge. Write distinctly, on one side of paper only, and do not use postal cards.*

## POSITIONS VACANT.

WANTED—A bright junior for a pleasant first-class Brooklyn pharmacy. Address "Rhei," care of AMERICAN DRUGGIST, 37 College place, New York.

WANTED about July 1. head clerk for first class pharmacy; a licentiate of Connecticut preferred; also junior of two to three years' experience about August 1; both must be able to offer excellent recommendations. Address Lock Box 677, New Britain, Conn.

## POSITIONS WANTED.

By a DRUGGIST of twenty-five years' experience, a situation as either day or night clerk. Wm. J. Mason, Port Gibson, Miss.

WANTED—Position as drug clerk in city or country by a graduate of N. Y. C. P. '93—good references etc. Address "I. I. H., 38 Clinton street, Newark, N. J.

WANTED—Permanent situation or as relief by a registered pharmacist in Connecticut; best of references, single, seven years' experience. Address "Drugs," care of Mrs. Murrell, Waterbury, Conn.

WANTED—Position in laboratory by a young man 20 years of age who has had four years' experience. Can give best of reference. Address "Central," care AMERICAN DRUGGIST, 37 College place, New York.

SITUATION WANTED as manager or head clerk by a druggist of over twenty years' experience; good references concerning ability and proper qualifications. Address "Competent," care of Messrs. T. Sisson & Co., Hartford, Conn.

DRUGGIST over twelve years' New York City experience, desires to change position and wishes place as manager or senior clerk, large town or city, New York State preferred. Address "Active" care of AMERICAN DRUGGIST, 37 College place, New York City.

SITUATION WANTED, about Sept. 1, by a Bachelor of Pharmacy (Toronto University), and graduate Ontario College of Pharmacy; four years' experience in large retail store; best of references. Address Norman T. McLean, care of A. E. Pilkey & Co., Central Drug Store, Chatham, Ontario.

DRUGGIST of 18 years' experience desires a position as manager; American; aged 34; married; registered New York State, City and New Jersey; can furnish best of references from past and present employers. Address "Druggist," 24 Crescent avenue, Jersey City, N. J.

DRUG CLERK—Graduate of N. Y. C. P., having ten years' experience in the leading pharmacies of New York City, desires a situation in or near New York. Fully competent to take charge; no bad habits; quick and accurate at prescription work and good salesman; age 30. Address "Jonas," care of AMERICAN DRUGGIST, 37 College place, New York.

## BUSINESS OPPORTUNITIES.

DRUG STORE for sale in Jersey City; good paying; large territory. "Saloi," care of AMERICAN DRUGGIST, 37 College place, New York City.

FOR SALE—A drug store in East Palestine, O., can be bought right by an immediate buyer. For full particulars address Dr. E. Greenmeyer, East Palestine, O.

DRUG STORE FOR SALE—Established nearly 30 years; rent low; manufacturing town; reason for selling given on application. Address C. A. Jones, druggist, McGrawville, Courtland county, N. Y.

CHOICE of two stores in New Jersey. Both having brightest prospects for the future; growing town. Price \$2,000 and \$4,000 cash. Address "Salophen," AMERICAN DRUGGIST, 37 College place, New York City.

FOR SALE, drug store in growing city; good trade; no cutting; fine fixtures (oak); stock fresh and salable; about \$1,500 cash; balance to suit; owner is not a druggist; a bargain if taken at once. R. L. Doy, Jamestown, N. Y.

FOR SALE.—Half interest in a drug store in a town of 2000 population. Good trade, good location stock clean, invoice \$3000. Owner a widow aged, 35, not registered. A doctor preferred. Address, B. C., P. O. Box. 629 Ada, Ohio.

DRUG STORE for sale—Owing to the death of one of the partners, a profitable drug store, situated in a thriving farming town of 2,300 inhabitants, is offered for sale. One-half interest or the entire business can be purchased as desired. Address T. B. Buffum, Admr., Walpole, N. H., Lock Box 488.

FOR SALE—Jordan Tablet Machine; one United States Dispensatory, 16th edition, also Remington's Practice of Pharmacy, second edition; Dunglison's Medical Dictionary, Revised edition; Gray's Quiz Compound; Chambers' Encyclopedia, and a full set of chemical apparatus. For information address, W. B. Odell, 13 Grand street, Poughkeepsie, New York.

**Clerks and Employers should call at this office, register their wants and examine our list of POSITIONS WANTED, POSITIONS VACANT and BUSINESS OPPORTUNITIES, which can be consulted free of charge.**

# American Druggist and Pharmaceutical Record.

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### "WITH THE ADVERTISERS."

WITH this issue we commence the publication of notes on the novelties and specialties manufactured and dealt in by wholesale and manufacturing druggists, druggists' sundriesmen and firms in related branches, the aim being to furnish in a condensed form intelligence regarding the newer preparations and apparatus introduced to the trade. Manufacturers will, in view of the wide publicity which such descriptions receive, find it to their advantage to keep us informed from time to time of additions to their catalogues, changes in prices, and other information likely to be of value to wholesale and retail druggists.

### THE LEAGUE AND ITS POLICY.

THE adoption by the Interstate Retail Druggists' League of a policy of silence as contrasted with its former life and drum methods has, as was to be expected, been misunderstood by a good many druggists and misinterpreted by pharmaceutical journals presuming to some knowledge of the situation. Of the extent of misunderstanding which has arisen a fair idea may be gathered on reference to the letter of "A LEAGUER" which appears elsewhere in this number. The observations of our correspondent while forceful

and accurate as to the needs of the League in the matter of spreading its teachings, lose much of their weight when it is known that the organization has never progressed one-half so well as under the system adopted by its present officers.

Silence has its advantages and it should not be necessary in the premises to indicate these specifically. The character and experience of the men who are at the head of affairs in the League are such as to insure the careful conduct of its affairs and we are confident that the trade can leave the matter of the policy to be pursued entirely in their hands.

### GOLD FOR GERMAN PROPRIETARIE.

THE tense feeling which has prevailed for some time past in financial circles with regard to the demonetization of silver has caused the issuance of an announcement by W. H. SCHIEFFELIN & Co. to the effect that payments for certain German proprietary products would in future be payable in gold or its currency equivalent only. The announcement was sent out in the form of a circular under date of July 1, as follows:

*Notice to the trade.*—Please take notice that in view of the uncertain future of currency any sale of the following articles made by us on and after this date will be payable in United States gold or its currency equivalent.

Then follows a list of the synthetic chemicals of the FARBEN-FABRIKEN VORM. FRIEDR. BAYER & Co., Elberfeld, Germany.

When interviewed on the subject, a member of the firm stated that the measure was only adopted as a precautionary one in the event of gold going to a premium, and even in that case payments would not necessarily be required in gold coin, but a currency equivalent would be accepted.

The step taken by W. H. SCHIEFFELIN & Co. is, of course, not a new one, having been inaugurated over twenty-five years ago by several New York drug firms, prominent among which being the firm of J. L. & D. S. RIKER. Since that time other firms have followed suit and MERCK & Co., SCHULZE-BERGE & KOEHL, and a few others now demand, but do not insist upon, gold payments for imported commission goods. When this fact is taken into consideration the present agitation over the matter can only be explained by the unsettled feeling which exists in business circles as a result of the prevailing financial stringency and of the uncertainty which exists as to the future status of silver.

**Morphine Versus Ptomaines.\***

By PROF. W. T. WENZELL, Ph.G., M.D., Ph.M.

California College of Pharmacy.

Since the late trial of Dr. Robert Welsford Buchanan for the murder of his wife, by poisoning her with morphine, the subject has excited more than usual attention in medical-legal circles, and is considered of vast importance when viewed from this standpoint. The chemists who made the analysis of the stomach, Drs. Witthaus and Doremus, are analysts enjoying a national reputation, whose attainments cannot be questioned. They claim to have found morphine in the stomach of Mrs. Buchanan, having demonstrated this to their satisfaction by the usual color tests peculiar to this alkaloid; but neither of the chemists was able to separate the morphine in its crystalline form.

The defense introduced in rebuttal of this testimony Dr. Vaughan, a well-known specialist on cadaver alkaloids or ptomaines. He claimed that inasmuch as the chemical experts failed to separate the morphine in the form of crystals, and had relied entirely upon its color-reaction with tests, the presence of morphine in the stomach was by no means to be considered established, and he contended that since some ptomaines give these reactions in common with natural alkaloids, as well as morphine, it was as likely that the lady may not have died from poisoning with morphine, but from disease.

The inference is that identical color-reactions are sometimes obtained from ptomaines, resembling those obtained from morphine when the latter alkaloid is not present. As these cadaver alkaloids are of frequent occurrence in dead bodies, even as soon as two hours after death, it stands to reason that too much care and circumspection cannot be exercised by the analyst in forming a final conclusion and to guard against every possible source of error. As to the processes used for the extraction and isolation of alkaloids for organic liquids, the systematic methods of Dragendoff have so far been superseded by better methods, and when this mode of procedure, which separates different alkaloids according to their solubility or insolubility in the different solvents, has been conducted with care and the products subjected to appropriate color tests, the result should be regarded as conclusive.

While it is true that amyl alcohol has been heretofore regarded *par excellence* as the solvent for morphine, it is now found to be an equally good solvent for a number of cadaver alkaloids. It is therefore not to be wondered at that the distinction between morphine and these ptomaines is now brought to narrow limits, and it would seem that medical jurists are justified in demanding that nothing but crystallized products be accepted as conclusive evidence. But on the other hand, although many of the ptomaines have been obtained in the crystalline form, an equally large number crystallize with difficulty or not at all; and when it is considered the crystallographic forms of those ptomaines that assume crystalline forms have not been studied or determined, then even a crystalline product has no other advantage save that of a probable high state of purity, and the analyst is still compelled to rely upon the color-reactions.

Of cadaver alkaloids by far the greater number have been discovered by Selmi. These with others have been collected and arranged by Husemann according to their behavior toward solvents into five groups.

1. Ptomaines which pass from acid solution over to ether. Selmi isolated these alkaloids of this group from the cadaver only. Their behavior toward tannic acid, iodo-iodide potassium and auric chloride is similar to those of the natural vegetable alkaloids; mercuric chloride gave no precipitate.

On evaporating two or three drops of the aqueous solution, the addition of three drops muriatic acid and one drop of sulphuric acid produced, on warming, a beautiful violet color. Nitric acid colors it yellow. Ptomaines of this class may be mistaken for digitaline which is also taken up by ether from acid solutions. But according to Selmi, no ptomaine which passes from acid solutions over to ether will give the known reaction which digitaline gives with bromine and sulphuric acid.

2. Ptomaines which pass from alkaline solutions over to ether. According to Selmi the ptomaines belonging to this group have the property of giving various color-reactions and they form crystalline products.

When subjected to physiological tests, they generally produce a short dilation of the pupil, and as a rule a diminution of the frequency of respiration. Most of these ptomaines reduce iodic acid like morphine, give with phosphomolybdic acid at first a violet and later on a blue color-reaction.

They reduce auric chloride and potassium dichromate with sulphuric acid, and most of these ptomaines are not precipitated by platinic chloride. To this group belong the greater number of cadaver alkaloids.

3. Ptomaines not soluble in ether but soluble in chloroform, as obtained from alkaline solutions. Selmi described the bases of this group as possessing a strong alkaline reaction, having a pungent, more or less bitter taste, and readily passing into a state of decomposition on the evaporation of their chloroformic solution, even at a low temperature, the residue losing a part of its solubility in chloroform. In common all of the bases of this group reduce iodic acid and frequently form with iodo-iodide potassium crystalline products. Also sulphuric acid, and Froehde's test a red color.

4. Ptomaines insoluble in ether and in chloroform. They readily pass from alkaline solution over to amyl alcohol. Of these bases Selmi has observed several, one not poisonous, the others poisonous. He mentions an instance where he obtained a ptomaine which formed with hydriodic acid long needle-shaped crystals. Another illustration is given by Felesar, who in the judicial investigation of a cadaver, isolated a base with amyl alcohol which did not reduce iodic acid and gave no color-reaction with the usual tests, thus making a mistake with organic plant-bases an impossibility.

5. Ptomaines which are not extracted either by ether, chloroform or amyl alcohol. This circumstance led Selmi to the discovery of bases which he found to be very soluble in water and almost tasteless. They give with sulphuric acid no color-reaction and are not precipitated by mercuric chloride, auric chloride or hydriodic acid. In reviewing these groupings of the cadaver alkaloids arranged from the researches of Selmi in connection with the query if amyl alcohol is a proper solvent for the isolation of morphine, we shall find that inasmuch as morphine is not extracted by ether and chloroform from acid and alkaline solution, that therefore this alkaloid is excluded from the first, second and third group.

Amyl alcohol removes morphine from alkaline solutions after the action of ether and chloroform, and may therefore be referred to group four. It seems that there are comparatively few only of ptomaine bases belonging to this group, and these do not possess many of the reactions belonging to morphine, and are frequently entirely absent. The color reactions for morphine are many and well established, and the writer is confident that no cadaver alkaloid will give all the reactions belonging to morphine as stated below:

1. Morphine dissolves in cold concentrated sulphuric acid, forming a colorless solution, which after standing several hours turns pink on the addition of a trace of nitric acid.

\*Read at the Semi Annual Meeting of the California Pharmaceutical Society, Francisco, May, 1893.

2. A mixture of one part morphine and four parts of cane sugar added to concentrated sulphuric acid give a dark-red color, which is intensified by a drop of bromin water.

3. A fragment of iodic acid added to a strong solution of a morphine salt, is decomposed with liberation of iodine which imparts a violet color to chloroform when shaking the latter with this mixture.

4. A strong neutral solution of ferric chloride causes a blue color with morphine; the color is changed to green by an excess of the reagent.

5. Neutral solutions of morphine produce yellow precipitates with chloride of gold or platinum, with potassium chromate and dichromate, but not with mercuric chloride.

6. Froehde's reagent (a fresh prepared solution of sodium molybdate, one millegramme in each c. c. of concentrated sulphuric acid) produces with morphine a magnificent violet color, changing to green.

In conclusion it may well be emphasized that analytical chemistry has always shown itself equal to the emergency, so that when tests and processes which heretofore were regarded infallible should prove doubtful, other tests and processes are discovered either to corroborate or correct. The recent introduction of acetic ether for the separation of alkaloids in forensic analysis, will no doubt prove an aid in the premises.

### The Comparative Value of Alexandria and of Tinnively Senna.\*

By OSCAR C. DILLY, PH.G.,  
Louisville College of Pharmacy.

The estimation of the value of the varieties of senna under consideration is based mainly on the quantity of the most active principle contained in the drug. It is now generally conceded that the main active constituent of senna is a glucoside, named cathartic acid by Dragendorff and Kubly, who first separated it.

The acid glucoside exists in the drug in combination with magnesium and calcium as cathartates. These salts being freely soluble are readily extracted from the drug by treating with hot water.

In separating cathartic acid according to Dragendorff and Kulby's method, the hot aqueous decoction is contaminated with much gum, which is eliminated by evaporating the decoction to a syrupy consistency, mixing with an equal volume of absolute alcohol and subsequently filtering. The filtrate is again evaporated and treated with several times its volume of absolute alcohol. On dissolving in water the precipitate resulting from this treatment with absolute alcohol, and which consists mainly of calcium cathartate and magnesium cathartate, and treating the solution with dilute hydrochloric acid, the cathartic acid is obtained as a precipitate. It is then purified by dissolving in absolute alcohol and washing with ether.

Cathartic acid occurs as an amorphous powder, ranging in color from brown to black; it is insoluble in water, but soluble in water in the presence of an alkali, forming a soluble combination with the latter. It precipitates from its alkaline solution on the addition of the mineral acids, oxalic acid, tartaric acid and acetic acid, but not on the addition of tannic acid. It is insoluble in ether and absolute alcohol, but freely soluble in dilute alcohol.

In estimating the value of Alexandria and Tinnively sennas, conclusions are also drawn from results obtained in separating the cathartic acid of Witte, which is now known to be a mixture of magnesium cathartate and calcium cathartate with probably a small quantity of free cathartic acid.

In preparing the cathartic acid of Witte, one pound of senna dried and ground to a moderately fine powder (representing 7,000 parts) is mixed with 21 grains of magnesium carbonate (representing 3 parts) and extracted with hot water. The decoction obtained in this way is evaporated to a syrupy consistency and mixed with an equal volume of absolute alcohol, causing the separation of a large quantity of gummy matter. The gum is removed by filtering, the contents of the filter washed with a little alcohol, and the washings added to the filtrate. The liquid is then evaporated to the consistence of a syrup and after cooling is shaken with three volumes of absolute alcohol whereby the cathartates of magnesium and calcium held in solution are separated in the form of a flocculent precipitate. After two days rest in a cool place, the supernatant liquid is decanted. The precipitate is washed well with alcohol, the washings being rejected. It is then dissolved in a small quantity of water and reprecipitated with absolute alcohol. The precipitate is finally collected and dried at a moderate temperature.

This substance occurs in the form of dark brown masses, not crystalline; it breaks with a shining fracture and is somewhat hygroscopic; it is freely soluble in water and in dilute alcohol, but insoluble in ether and absolute alcohol; odor and taste very slight.

Thirty grains produce purgative effects, not accompanied by nausea, stomach pains or colic.

In summing up the results from the comparative estimation of cathartic acid in a number of samples of both varieties, the Alexandria appeared in a more favorable light than the Tinnively.

The average yield of cathartic acid from Alexandria senna was 0.9 per cent.; that from the Tinnively variety 0.6 per cent.—a difference of 0.3 per cent., or one-third less. This difference was not borne out, however, by the results obtained on separating the cathartic acid of Witte—the substance consisting of magnesium cathartate and calcium cathartate. The average yield of this product from the Alexandria senna was 1.4 per cent., that from the Tinnively variety 1.1 per cent., or about one-fifth less.

In addition to containing a larger percentage of the main active constituent, Alexandria senna is of greater value in manufacturing the liquid preparations of the drug, for the reason that it contains a much smaller percentage of gummy matter, and is accordingly easier and more quickly extracted than the Tinnively variety. Tinnively senna has two advantages over the Alexandria variety; one is its appearance and the other its price. In the current retail quotations the minimum price of Alexandria senna is 25 cents per pound and its maximum price 38 cents; the minimum price of Tinnively senna is quoted at 15 cents and its maximum price at 30 cents. In point of appearance the Alexandria variety is always found to be more or less broken and crushed, and frequently mixed with a considerable quantity of leaf-stalks. The Tinnively variety is cleaner, and being much less brittle is unbroken, and in addition to being longer is seemingly fresher. A safe conclusion is to recommend the use of the Tinnively variety for sale at the counter on account of its handsome appearance, and the use of the Alexandria variety in the manufacture of senna preparations on account of its greater strength and easier extraction.

An effective and rather sensational means of advertising, which is very appropriate to such occasions as Independence and New Year's days, is the sending up of toy balloons from in front of the store, attaching to each balloon a ticket entitling bearer to a bottle of cologne, a brush, or some such article.

\* Read at the recent meeting of the Kentucky Pharmaceutical Association and communicated by the author.

We presume that by "official" you mean 10 per cent. water of ammonia, but you should remember that 28 per cent. is also official as stronger water of ammonia. One quart of water at standard temperature weighs  $2 \times 7,291$  grains or 14,582 grains. One quart of 10 per cent. ammonia water, having a sp. gr. of 0.959 would weigh  $0.959 \times 14,582$  grains, or 13,984 grains.

It would require 10 parts of 28 per cent. to make 28 parts of 10 per cent. (one part of 28 per cent. can make as many parts of 10 per cent. as 10 is contained in 28, or 2.8 parts. If 2.8 parts of 10 per cent. require one part of 28 per cent., 28 parts would require 10 parts), and 13,984 grains would require a like proportion, or 28 parts of 10 per cent. is to 13,934 grains of 10 per cent. as 10 parts of 28 per cent. is to 4,994 grains of 28 per cent.

Then 4,994 grains of 28 per cent. and enough distilled water to make 13,984 grains (8,990 grains of water) gives one quart of 10 per cent.

14. I have a lot of spoiled Gardner's syrup of hydriodic acid. How can I restore it?

Its red color is due to free iodine, resulting from the decomposition of the acid. The simplest method is to titrate with sodium hyposulphite solution. The iodine is converted into sodium iodide, which is colorless, and the hyposulphite (thio sulphate) into sodium tetrathionate or tetrasulphate as follows:  $2\text{Na}_2\text{S}_2\text{O}_3 + \text{I}_2 = 2\text{NaI} + \text{Na}_2\text{S}_4\text{O}_6$ .

16. "What causes the change in mist. ferri et ammon. acetatis, or Basham's mixture? I cannot make it clear."—J. L. D.

If your solution of ammonium acetate is too strong of ammonium carbonate, as is often the case, the iron is precipitated. If each ingredient is of correct strength a clear solution always results, but it will not keep. The iron acetate formed becomes oxyacetate and precipitates. A little excess of acetic acid hinders the change and a little hydrochloric acid prevents it, but alters the character of the mixture. *The new U. S. P.* will drop the syrup and substitute *glycerin* and call it *liquor ferri et ammonii acetatis*. The formula will be:

|                                   |          |
|-----------------------------------|----------|
| Tincture of chloride of iron..... | 30 c.c.  |
| Diluted acetic acid.....          | 30 c.c.  |
| Solution of ammonium acetate..... | 300 c.c. |
| Aromatic elixir.....              | 100 c.c. |
| Glycerin.....                     | 120 c.c. |

Water to make 1,000 c.c.

### Tests of Death.\*

BY EDWIN HAWARD, M.D. EDIN., F.R.C.S. ENG.

A case has come lately under my observation in which the value of the diaphanous test of death has been illustrated at its just worth, and as the matter is one of supreme practical moment I think it may be considered deserving a brief notice in the pages of *The Lancet*. The diaphanous test consists in taking a hand of a supposed dead person, placing it before a strong artificial light, with the fingers extended and just touching each other, and then looking through the narrow spaces between the fingers to see if there be there a scarlet line of light. The theory is that if there be such a line of scarlet color there is some circulation still in progress and therefore evidence of vital action, whilst if there be no illumination then the circulation has ceased and death has occurred. The French Academy of Medicine was so impressed with the value of this test that it awarded, I believe, to the discoverer of it a considerable prize. The illustration I am about to give indicates, however, that this test must be received with the utmost caution. The facts run as follows: I was called in January last to visit a lady seventy-three years of age, suffering from chronic bronchitis. She had often

suffered at intervals from similar attacks during a period of twenty-five years. The present attack was very severe, and as she was obviously in a state of senile decrepitude her symptoms naturally gave rise to considerable anxiety. Nevertheless she rallied and improved so much that after a few days my attendance was no longer required. I heard nothing more of this lady until Feb. 6th—a period of three weeks—when I was summoned early in the morning to see her immediately. The messenger told me that she had retired to bed in the usual way and had apparently died in the night, but that she looked so lifelike there was great doubt whether death had actually taken place. Within half an hour I was by her bedside; there was no sign of breathing, of pulse, or of heart-beat, and the hands, slightly flexed, were rather rigid, but the countenance looked like that of a living person, the eyes being open and lifelike. I believed her to be dead and that the rigidity of the upper limbs indicated commencing rigor mortis; but this curious fact was related to me by a near relative that once before she had passed into a death-like state, with similar symptoms, even to the rigidity of the arms and hands, from which state she had recovered, and after which she had always experienced the direst apprehension of being buried alive. Her anxiety, it will be easily conceived, was readily communicated to her relatives, who urged me to leave nothing undone for determining whether life was or was not extinct. Under the circumstances I suggested that Dr. (now Sir) Benjamin Ward Richardson, who has made the proofs of death a special study, should be summoned. He soon arrived and submitted the body to all the tests in the following order, each test being written down at the moment by myself: 1. Heart sounds and motion entirely absent, together with all pulse movement. 2. Respiratory sounds and movements entirely absent. 3. Temperature of the body taken from the mouth the same as that of the surrounding air in the room, 62° F. 4. A bright needle plunged into the body of the biceps muscle (Cloquet's needle test) and left there shows on withdrawal no sign of oxidation. 5. Intermittent shocks of electricity at different tensions passed by needles into various muscles and groups of muscles give no indication whatever of irritability. 6. The fillet-test applied to the veins of the arm (Richardson's test) causes no filling of veins on the distal side of the fillet. 7. The opening of a vein to ascertain whether the blood has undergone coagulation shows that the blood was still fluid. 8. The subcutaneous injection of ammonia (Monte Verdi's test) causes the dirty brown stain indicative of dissolution. 9. On making careful movements of the joints of the extremities, of the lower jaw and of the occipito-frontalis rigor mortis is found in several parts. Thus of these nine tests eight distinctly declared that death was absolute; the exception, the fluidity of the blood, being a phenomenon quite compatible with blood preternaturally fluid and at a low temperature, even though death had occurred. 10. There now remained the diaphanous test, which we carried out by the aid of a powerful reflector lamp, yielding an excellent and penetrating light. To our surprise the scarlet line of light between the fingers was as distinct as it was in our own hands subjected to the same experiment. The mass of evidence was of course distinctively to the effect that death was complete; but, to make assurance doubly sure, we had the temperature of the room raised and the body carefully watched until signs of decomposition had set in. I made a visit myself on a succeeding day to assure myself of this fact.

The results of these experimental tests were satisfactory as following and corroborating each other in eight out of ten different lines of procedure; but the point of my paper is to show the utter inadequacy of the

\*From *The Lancet*.

diaphanous test, upon which some are inclined entirely to rely. Sir Benjamin Richardson has reported an instance in which the test, applied to the hand of a lady who had simply fainted, gave no evidence of the red line; she therefore, on that test alone, might have been declared dead. In my case the reverse was presented; the body was dead, while the red line, supposed to indicate life, was perfectly visible. Hence the test might possibly lead to a double error and ought never of itself to be relied upon.

It is a question worthy of consideration whether the coloration observed was due to the fluid state of the blood after death; it is not unreasonable to suppose so, but I prefer merely to offer the suggestion without further comment.

#### Uva Ursi and Sweet Spirit of Niter.

The following example of a common prescription incompatible involving the decomposition of a fluid extract rich in gallic acid by spirit of nitrous ether was brought before the members of the California Pharmaceutical Society at a recent meeting.

|                            |       |
|----------------------------|-------|
| Sp. ætheris nitrosi.....   | ℥ i   |
| Ext. fl. buchu.....        |       |
| Ext. fl. uva ursi, ss..... | ℥ ii  |
| Aqua.....                  |       |
| Syrupi, ss.....            | ℥ iss |
| M. ft. mist.               |       |

The mixture evolves nitrous fumes, and the consequence of corking the bottle at once may be an explosion. An investigation of the constituents of the mixture showed that neither the water, the syrup nor the fluid extract of buchu had anything to do with the decomposition. The fluid extract uva ursi, then, was the cause of the formation of nitrous gas. A few experiments with the leaves (which are in some countries used for tanning leather) showed that pure tannin had no effect upon spirits of nitrous ether, but when the latter is brought into contact with gallic acid, one of the principles contained in uva ursi leaves, an evolution of nitrous gas is the result.

#### Tincture of Myrrh in Diphtheria.

Dr. Ströhl of Munich (*Mediz. Zeit.*) recommends the use of myrrh in diphtheria as follows:

|   |             |
|---|-------------|
| Tincture of myrrh.....                  | 4 grammes   |
| Glycerin.....                           | 8 grammes   |
| Distilled water sufficient to make..... | 200 grammes |

This mixture should be administered every hour during the day and every two hours at night. For children up to two years old a coffee spoon is a dose, up to fifteen years old a dessertspoonful, and for adults a tablespoonful should be given. Local treatment is not necessary, though it is advantageous to gargle with 0.5 per cent. chloroform water. After several days the resin will appear in the urine, but it can be distinguished from albumen by its solubility in alcohol. Ströhl finds a notable increase of the leucocytes to follow this treatment. The treatment should be stopped on the appearance of renal colic.

#### Transmission of Cholera by Means of Flies.

It has been proved that tubercle bacilli are found in the excreta and bodies of flies that have been feeding on phthisical sputa, and it has been suggested that it is possible for tuberculosis to be spread by these means. In the *Centralblatt für Bakteriologie und parasitenkunde*, Band xii, p. 25, is a communication from Dr. Sawtschenko, who has found that cholera bacilli possessing all their virulent properties can be demonstrated for at least four days in the intestinal canal and dejections of flies that have been feeding on the stools of cholera patients or on the intestinal contents of those who have

died from the disease. He also produces evidence to show not only that the bacilli pass through the intestinal tract of flies, but also that during the passage actual multiplication takes place. It is likewise an interesting fact to observe that the longer the interval of time which is allowed to elapse between the period of infection and the examination of the dejecta the smaller is the number of saprophytic organisms present and the larger that of the cholera bacilli. Control experiments were made with flies which had been prevented from incurring chance inoculation, and negative results followed. Dr. Sawtschenko, therefore, is of opinion that flies may act not only as carriers of the morbid agent of cholera, but also as hosts of the bacilli.

**Local Anæsthesia.**—Hacker, in his lectures, quoted from Schleich, at the last surgical congress, on the "so-called infiltration-anæsthesia," remarking that this was a very plausible theory whereon a reasonable explanation could be advanced in favor of many local applications for surgical operation. Common salt, when thrown into the intercellular tissue, will produce such a diffuse effusion that any kind of cutting may be undertaken without pain. This preparation (in a 0.2 per cent. solution) with a very small quantity of cocaine will make an excellent anæsthetic, and one that Hacker frequently uses, in the form of

|                      |     |
|----------------------|-----|
| Aque destill.....    | 100 |
| Cocaine.....         | 0.1 |
| Sodium chloride..... | 0.2 |

Injections with this solution must be used several times to produce the necessary œdema, after which a painless operation may be undertaken. If the insertion of the needle is to be made painless, it may be previously treated with ethylchloride.—*Medical Press.*

**Salol Gargle.**—Seifert (*Centralb. f. Klin. Med. Quar. Ther. Rev.*) confirms Georgi's favorable report. He used salol as a wash or gargle in ulceration of the tongue, stomatitis, angina, and diphtheria, first dissolving six parts of salol in one hundred of spirit, and then adding a dessertspoonful of this solution to a glass of warm water. Seifert also used salol as a powder for insufflation, but he finds it less beneficial than iodol, because, though antiseptic and non-irritating, it does not adhere sufficiently well to mucous membranes and ulcerated surfaces.

**Peroxide of Hydrogen against Cholera.**—Dr. Elmer Lee, of Chicago reports in the *Clinical Review* of that city that in his experience Marchands Medicinal peroxide of hydrogen proved a better antiseptic than any other drug heretofore known in the treatment of cholera. He administered the remedy in the form of a 4 per cent. solution in water, in cupful doses, at intervals of two hours during the sickness.

**Dyspepsia.**—Dujardin-Beaumetz recommends the following:

|                   |         |          |
|-------------------|---------|----------|
| Bismuth subnit.   | } ..... | ss 3 ili |
| Magnesii sulph.   |         |          |
| Crete preparat.   |         |          |
| Sodii phosphatis. |         |          |

M. Div. in pulv. No. xi.

Sig. One after each meal.

**Antidotes to Cocaine.**—As prophylactics against the untoward effects of cocaine, quinine and other antipyretic remedies should be given before its administration. Ammonia nitrite of amyl and ether inhalations to keep up respiration are regarded as the best antidotes.

**Cimicifuga.**—Ten to thirty drops of the fluid extract after meals cures seminal emissions.—REED

## Pharmaceutical Association Meetings.

### MONTHLY CALENDAR.

| Date.     | Association.         | Place of Meeting. |
|-----------|----------------------|-------------------|
| Aug. 8... | Montana .....        | Helena.           |
| " 8...    | North Dakota .....   | Fargo.            |
| " 8...    | Wisconsin .....      | Fond du Lac.      |
| " 9...    | North Carolina ..... | Greensboro.       |
| " 10...   | Georgia .....        | Rome.             |
| " 10...   | Illinois .....       | Chicago.          |
| " 14...   | P. A. .....          | Chicago.          |
| " 15...   | South Dakota .....   | Yankton.          |
| " 21...   | Int. Congress .....  | Chicago.          |

### Louisville Botanical Club.

At the meeting held at the club rooms in the College of Pharmacy Building the Louisville, Ky., Botanical Club passed a resolution that a special fee of 25 cents be charged for night calls so as to repress the tendency to call up clerks at night for trivial reasons. The club also adopted a resolution condemning the practice of some of the local physicians who are engaged in the dispensing of their own medicines, which is very injurious to the druggists and does not benefit the physician or his patient.

The Botanical Club has also taken cognizance of the fact that the physicians are prescribing a great many secret and semi-secret medicines, and the results of their being made aware of the fact will be made known at their next meeting. The regular routine of business was gone through with and the meeting adjourned sine die.

### North Dakota Association.

On account of the Fargo fire it has been found necessary to change the place of holding the regular annual meeting from Fargo to Grand Forks, which takes place August 8 and 9, and if necessary will continue the 10th.

### Meetings of Boards of Pharmacy.

#### JULY.

18, Minnesota—  
19, South Carolina—  
20, New Jersey—Newark.  
26, New Hampshire—

THE MICHIGAN BOARD met at Star Island, St. Clair Flats, on June 22 and 23, and examined 152 applicants for registration. Of that number sixty-five were granted certificates as registered pharmacists and fifty-three certificates as registered assistants. The following are the successful ones:

Registered pharmacists—J. C. Anderson, Detroit; H. H. Austin, Marquette; W. Barber, Mendon, O.; C. M. Baskerville, Chatham, Ont.; G. H. Beal, Detroit; A. S. Blakey, Ada, O.; O. L. Boice, Yale; E. R. Borley, Detroit; T. J. Boroff, Van Wert, O.; B. F. Brown, New Philadelphia, O.; C. J. Brunskill, Sharon Center, O.; C. F. Buchholz, Grove City, O.; T. Callan, Detroit; C. Cary, Bay City; A. Carrier, Detroit; S. Coleman, Kalamazoo; W. H. Cooley, Detroit; F. A. Cooper, Venetia, Pa.; J. A. Cooper, Fowlerville; G. S. Crannell, Detroit; J. A. Crittenden, Detroit; M. J. Cruikshank, Lexington, A. T.; Dennen, Detroit; J. V. Eitel, Columbus, O.; R. E. Elrick, Harrisville, Pa.; F. Faber, Detroit; H. L. Ford, Port Huron; C. G. Foster, Yale; H. R. Gilmore, Harrisville; W. F. Harper, St. Mary's, O.; H. G. Hawn, Sterling, O.; T. F. Heaverich, Detroit; C. O. Hill, Ann Arbor; E. A. Iverson, Detroit; E. B. Kolb, Detroit; W. Lennon, Yale; S. R. Light, Ada, O.; S. W. McCleary, Kirby, O.; E. S. McColl, Detroit; N. Menerey, Yale; A. Millard, Detroit; G. Morris, Ann Arbor; W. B. Newton, Ann Arbor; W. F. Park, Chatham, Ont.; F. R. Perry, Bay City; D. Pettit, Otterville, Ont.; A. T. Platta, Port Sanilac; T. H. Pohlman, New Bremen, O.; H. L. Rees, Mt. Vernon, O.; R. H. Reyecraft, Detroit; W. J. Rockefeller, Detroit; W. Scherer, Ann Arbor; D. S. Schweitzer, Petoskey; C. C. Shearer, Coldwater; M. Spiro, Detroit; L. L. Swartz, Ada, O.; E. W. Tonkin, Detroit; L. Van Vliet, Detroit; G. Wagner, Ann Arbor; G. Wever, Marquette; J. C. Wilson, Detroit; R. Wilson, Morenci; H. Woolford, Heno, O.; U. G. Wriston, Ada, O.; H. G. Young, Detroit.

Registered assistants—N. F. Alford, Leipsic, O.; T. T. Barnes, Toronto, Ont.; M. R. Blair, Birmingham; A. Bower, Fort Recovery, O.; W. P. Brown, Jr., Lexington; F. Burch, Adair; H. W. Cadwell, Detroit; G. M. Coon, Detroit; F. W. Christopher, Ada, O.; E. F. Churchill, Detroit; J. D. Collins, Hart; C. Cowling, Henrietta; H. Dedenbach, Detroit; H. W. Evans, Grayling; W. H. Evans, Ada, O.; J. M. Freeman, St. Charles; O. H. Freeland, Mason; E. G. Fueling, Detroit; B. L. Green, Mason; G. N. Gaukel, Bay City; F. W. Hamilton, St. Charles; M. Hebenthal, Paulding, O.; H. Heffebower, Detroit; R. Hill, Norwich, Ont.; M. J. Hills, Grand Rapids; E. R. Huber, New Hampshire, O.; E. T. Jones, Chatham, Ont.; W. J. M. Jackman, Detroit; A. E. Johnson, Detroit; W. A. Jones, Ludington; G. S. Kirby, Detroit; J. E. Knapp, Bay City; W. B. Knapp, Grand Rapids; N. G. McBean, Detroit; C. L. McIntyre, St. Marys, O.; H. A. McKenna, Yale; C. A. Machen, Detroit; E. L. Moore, Melvin; J. J. Morriah, Detroit; A. J. Newman, Detroit; F. Neabitt, Flint; G. C. Park, Chatham, Ont.; E. G. Payne, Roscommon; W. P. Robinson, Detroit; F. E. Schall, Three Rivers; A. A. Schram, Yale; C. E. Smith, Grand Blanc; V. Thomas, Fowlerville; A. W. Thompson, Sanilac Center; G. J. Wain, Detroit; H. B. Ward, Detroit; F. W. Wilhelm, Bay City; L. M. Morrison, Williamston.

The board elected as officers for the ensuing year: President, Othmar Eberbach, Ann Arbor; secretary, Stanley E. Parkill, Owosso; treasurer, George Gundrum, Ionia.

The next meeting of the board will be held in Marquette at 9 A.M., August 29.

NORTH CAROLINA BOARD.—At a recent meeting of the Board of Pharmacy held in the city of Raleigh, sixteen candidates for license to practice pharmacy appeared for examination. The following passed successfully, and were awarded certificates as licentiates in pharmacy: G. W. Gaskill, New Bern; R. E. Lee, Clinton; A. B. Persse, Wilmington; Davis R. Davis, Durham; Alice E. Johnson, Aberdeen; A. W. McClenahan, J. E. Morgan and Geo. P. Hart, Raleigh. Lady pharmacists are few in the South, and Miss Johnson enjoys the distinction of being the second registered female pharmacist in the State of North Carolina.

NORTH DAKOTA BOARD OF PHARMACY.—W. S. Parker, secretary of the North Dakota Board of Pharmacy, announces that the next meeting of the board will be held at Fargo, on August 11, 1893, at 10 o'clock A.M.

### The World's Fair Excursion.

A party of New York and Brooklyn druggists is being organized to visit Chicago and the World's Fair. The party will start about August 11 or 12, reaching Chicago just in time for the meeting of the A. P. A. A schedule has been arranged which will allow of a stopover at the national capital for nine hours and will enable the party to pass through the wonderfully beautiful scenery of the Blue Ridge and Alleghany Mountains during daylight, when it can be seen and appreciated.

The accommodations en route will be of the best. It is proposed that the party go on a special train, but the tickets will allow of a choice of several routes returning, one of which is by way of Niagara Falls.

The price that will be asked for transportation depends upon the action taken by the railroads. At present the ticket for the round trip would cost \$17, but there is every probability that a considerable reduction will be made from this figure, and all joining this party may feel assured that they will get the lowest possible rate consistent with good train service.

A number of pharmacists have already signified their intention of going and it is hoped that this number will be materially increased. Those who contemplate going

should address Caswell A. Mayo, 37 College Place, New York, or Luther F. Stevens, 141 Baltic street, Brooklyn, stating the number of tickets required.

## Correspondence.

### Let Us Have Your Views.

#### To the Editor:

I am convinced that pharmaceutical journals might be made of greater interest to the pharmacists of the whole country if they would invite rank and file to contribute to their columns. Ludwig Born says: "Every man can be an author if he only tries." Perhaps I myself have too much of the "itch for scribbling," but I would gladly swear off for ten years if I could but induce with this my "last brilliant effort" ten druggists to write something of interest for any of the journals. It matters not how the article is built if it contains a new idea expressed in the writer's own style. Jean Jacques Rousseau did not find out that there was an author in him until the French Academy propounded its famous query for a prize essay: "Has Art and Science Contributed to Increase the Happiness of Mankind?" This query puzzled Rousseau and kept him awake at night. Finally he put pen to paper and answered "No!" with his reasons for arriving at such a verdict—and in the morning he arose to find himself a famous author. This is simply history, and as history repeats itself druggists should seize the opportunity and endeavor to elucidate some knotty problem of the profession and so become famous. O. L. D. TYMER.

### A Policy of Silence.

#### To the Editor:

The strange attitude adopted by certain pharmacists and associations of pharmacists toward the daily and pharmaceutical press has forced itself upon the attention of others besides the writer. The "young men" of the daily press who evolve such biased and unfair accounts of the business methods of pharmacists are, of course, responsible for the feeling of distrust which has arisen with regard to newspaper reports, but why this should be communicated to the pharmaceutical press, which stands ever ready to further the best interests of the pharmaceutical profession, is, I must confess, beyond my comprehension. These remarks are prompted by the peculiar action of the Interstate Retail Druggists' League in withholding reports of their meetings from the journals and its attempts to preserve secrecy as to the business transacted. With regard to the daily press I think it is accepted by all thinking fellow druggists that the wisest policy to pursue is to steer clear of the newspapers and treat their hastily prepared and unjust strictures with calm silence and refuse to use them as a medium either to air theories or expound facts. With the pharmaceutical journals it is necessary and imperative to adopt a different policy; for these publications rarely if ever reach the general public and are becoming more and more the medium of interchange of opinion and experience between druggists. Here, if anywhere, is the arena in which to advance new ideas, correct false ones, to widen our range and benefit by the experience of others working in the same field. The pharmaceutical press is

making its power for the good and advancement of the profession felt every year, and wherever it can exercise its functions independently of the patent medicine or "house" interests it proves of incalculable service to true pharmacy.

The Interstate League as remarked above decided recently to maintain secrecy as to the proceedings transacted at its meetings, and it would be difficult to think of a more suicidal or insane policy. Good management never dictated such a policy, and it is hard to conceive how such a method of conducting business, which is presumed to interest every druggist, ever came to be inaugurated. Let the drug and allied trades know what action is being taken, so that a more general interest in the affairs of the League may be aroused among the rank and file, who will be glad to come forward with help and suggestion provided they are made aware that their support is looked for and would be accepted. The League or any similar organization can only succeed by spreading its teachings to the four quarters of the wind—a bureau of education should be its first equipment. The few who attend the meetings can accomplish little indeed if the 35,000 druggists of the United States are to be kept in ignorance and at the same time dictated to by a minority. But the whole business must be a foolish experiment and the officers of the League and of all similar association must one day realize that the drug journals are their greatest source of strength in any fight which may be undertaken. It has been so in the past and will continue, providing we only ask them to be with us and inform the drug world of our doings.

A. LEAGUER.

### New York City.

J. C. Von Schaack, of Chicago, has moved to this city and expects to engage in business and make his home with us.

The firm of C. H. Dietz & Co., consisting of C. H. Dietz and Ernest Dietz, was dissolved on July 1, Ernest Dietz retiring from the firm.

Theodore Kraemer, proprietor of the pharmacy at Stanton and Lewis streets, has instituted an action in the Superior Court to recover \$10,000 from a saloon keeper who ejected him forcibly from his premises a few days ago.

T. E. Fraser, of 54th street and 2d avenue, and the West Side Pharmacy, 29th street and 8th avenue, has disposed of his branch establishment at 138th street and 3d avenue to L. A. Frisick, formerly of the Family Pharmacy, 6th avenue and 31st street, and lately of 57th street and 10th avenue.

Ed. L. Milhau, doing business as J. L. Milhau's Son, at 183 Broadway, has brought suit against his mother, Mme. Philippina Milhau, her grandson, Louis John De G. Milhau, and the Union Trust Company. It is an action to settle his accounts as executor of his brother, the late General John Milhau, U. S. A.

Johannes Caspary was a clerk for Charles F. Mayn, at 515 Ninth avenue, until last Fall, when he received an installment of \$1,500 on a \$5,000 inheritance. He then resigned and devoted himself to "blowing in" his inheritance, which being accomplished he borrowed right and left and is now being sought for by Inspector Byrnes' staff, as his creditors desire to realize.

The classmates of D. J. Gerrity, Ph.G., N. Y., C. P. '79, will join with us in congratulating him on his marriage to Miss Mary Cunningham, which took place on June 21st, 1893, in this city. Mr. Gerrity is assistant chemist under Dr. Charles Rice in the Department of Public Charities and Corrections, and is the only person in the Department who is officially styled "Assistant Chemist."

Fred J. Wulling, Ph.G., formerly of the Brooklyn College of Pharmacy and now professor of pharmacy and dean of the faculty of the Minnesota University School of Pharmacy is spending a few days in the vicinity of New York. It is his intention to attend the different pharmaceutical congresses in Chicago and to return again to New York before taking final departure for the West, in September.

Messrs. Griffin and Davies, clerk and librarian respectively of the New York College of Pharmacy, are disposed to wax merry over the account given in a recent number of the *Pharmaceutical Era*, of Detroit, of the recent arrival at the college of a marine specimen from Portsmouth, N. H. The yarn of its "local man" runs thus:

It was one of those baking days last week when the only ambitious thing in town was the mercury. In the college building sat Clerk Griffin alternately mopping his perspiring brow and frantically agitating a huge palm leaf fan. From another chair Librarian Davies was pensively looking out at a passing ice cart. Suddenly an expressman and a huge box appeared. A little breeze of excitement stirred the leaden atmosphere, and the janitor was summoned with a hammer. The box was from Portsmouth, N. H., and marked a "present from one of the class of '94." Scarcely was the box opened when there was a scatter. Librarian Davies mounted his desk at a bound, while Clerk Griffin climbed up on his chair like a young lady who has seen a mouse. Amid the sea-weed which filled the box was seen a long black tail which distinctly wiggled.

"It's a sea serpent," ventured Mr. Davieh.  
"Or an electric eel," volunteered the more wary Mr. Griffin.

"Fo' de Lawd" muttered the trembling colored servant, "I tink it's the Debbil."

As if that had been the correct guess the tail was again seen to wiggle. The janitor's courage was the first to be restored, however, and with a yell of defiance he plunged in his hand to draw out—nothing more dreadful than a fine specimen of the sea plant known as the Devil's Apron.

All who are familiar with the location of the library in the college building will appreciate the extent to which the reporter drew upon his imagination. Although Mr. Davies possesses good eyesight he naturally objects to being credited with sufficient keenness of vision to pierce through several thicknesses of brick wall, not to mention a storm door. Mr. Griffin became reminiscent over the story and had some caustic things to say of reporters and their methods. The sale of the New York and Brooklyn Formulary some years ago—but "that," as Rudyard Kipling would say, "is another story."

### New York State News.

A. B. Burns, of Binghamton, is a candidate for the office of county treasurer.

J. Roemer, Ph.G., with E. Hikeman, of Goshen, left on Saturday, July 1, for a visit to the World's Fair.

H. C. Dempsey's residence at 177 East avenue, Rochester, was entered by burglars recently, but they were frightened away before any large booty was secured.

Joseph J. Herbert, of 86 Randolph street, Brooklyn, has been granted an absolute divorce from his wife. Mr. Herbert's brother Karl, who lives in Germany, is named as correspondent.

T. Whorle, of Jefferson and Kingsley streets, Black Rock, and Miss Minnie Schwartz, of Humboldt Parkway, were married at the home of the bride's parents.

The Smith Drug Co. have purchased the store of Dr. Henry Müller at 122 Smith street, Brooklyn. Max Metzger, who will be manager of the store, has had considerable experience in Newport, Ky., and is a graduate of the Cincinnati College.

The A. Bloomingdale Company, of Gloversville, has been incorporated with the Secretary of State to manufacture Forestine remedies and other proprietary medicines. The capital stock is \$100,000, and the directors are James Hall, James W. Filmer, Clark L. Jordan, A. Bloomingdale, P. I. Carmichael, M. V. B. Stetson, William H. Dixon, John S. Phillips, M.D., and E. W. Peck.

### Massachusetts Mention.

Fred Baker, formerly of Theodore J. Metcalf & Co., of Boston, has entered the service of William F. Halm, of Newton.

F. H. Martin's pharmacy, 257 Columbus avenue, Boston, was entered by thieves on June 18 and \$45 in money and goods stolen.

The marriage is announced of Samuel J. Smith and Miss Lucy L. Sanford, both of Fall River. Mr. Smith is a well known pharmacist of that place.

Joseph L. Parker, who has kept a pharmacy at the corner of Tremont and Eliot streets, Boston, for thirty consecutive years, celebrated the anniversary of his opening on June 21.

David P. Sullivan, who was with E. M. Whelden, of Pittsfield, for five years, has taken charge of the McGovern store in Stockbridge, having purchased the interest of M. A. Lennon.

W. B. Shaw, who has been running the drug store corner of Washington and Orne streets, Attleboro, for the past few weeks, has purchased it from its previous owner, Dr. J. B. Gerould.

The Leavenworth & Dikeman Co. has been organized at Waterbury to deal in drugs, chemicals, etc., with a capital of \$3,000 in 120 shares of \$25 each. The subscribers are George C. Curtis, Charles A. Storrs and George S. Howey, forty shares each.

### Random Notes.

The drug store of W. C. Downey, in the Portland Flats, Washington, was entered by thieves on June 15, who made off with the cash register.

H. A. Dupee, a well known druggist of Bridgeport, Conn., has recently returned home from an extended Western trip which embraced a visit to the World's Fair.

H. F. Scott, formerly of Aberdeen, S. D., but more recently of Chicago, has returned to Aberdeen and purchased a half-interest in the drug business of F. G. Newell & Co.

J. W. Wardel has opened a pharmacy in Tenafly, N. J., and has named it "Tenafly Hall Pharmacy." Mr. Wardel was formerly connected with Odell & Littebrandt, of Gloster.

John Rice, Milton, Ia., has sold his half interest in the drug store of Summer & Rice at that place to Dr. Summer, his partner, who will conduct the business as heretofore. Mr. Rice will go to Colorado soon for his health.

## With the Advertisers.

### Panopeptone.

Fairchild Brothers and Foster of New York have introduced a new food product for invalids and convalescents which they have named "Panopeptone." The new substance is said to consist of the entire edible parts of prime, lean beef and best wheat flour thoroughly cooked, properly digested, sterilized and concentrated in vacuo. Containing as it does all the nutrients of these two great types of foods, it should prove a restorative and health giver of the first order and be in great demand by physicians. Information in detail regarding panopeptone can be obtained by writing to the manufacturers and mentioning the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD.

### True Insect Powder.

Druggists who have a regard for their reputation exercise care in the selection of powdered drugs of vegetable origin, which it is well known are the particular subjects of sophistication and adulteration.

Insect powder is an example which has received the attention of many prominent investigators, it being a matter of extreme difficulty to determine the exact extent of sophistication or adulteration which may have been practiced. To procure true insect powder it is necessary to go to headquarters, and the headquarters for this article is Tyler & Finch, direct importers, 54 Cedar street, New York, who will gladly quote prices on quantities to druggists mentioning this paper.

### Baby Powder.

Dr. Julius Fehr, Hoboken, N. J., has manufactured his well known "Talcum Powder" ever since 1868, but it was not until 1873 that he introduced his specialty to the attention of practitioners of medicine. The powder at first contained nothing but a specially prepared talcum, but later he added carbolic acid to it, which makes it more efficient. Few proprietary preparations have stood the test of time so well and is so much appreciated by the medical profession as Dr. J. Fehr's "Compound Talcum" Baby Powder, and this is well borne out by the increasing favor with which it is received on all sides as a dermal powder of approved merit.

### Pure Wines.

The best is none too good. By observation this can be readily proven. The foundation of a solid, successful business is laid by putting out reliable articles to the customers. Duroy & Haines, Sandusky, Ohio, have acquired a large business and wide reputation by making wines pure and reliable and sending their patrons the best. This firm is among the leaders in point of quality. Write to them for particulars.

### Cocaine-Boehringer.

Dr. Carl Koller, formerly of Vienna, now of New York, through whose discovery cocaine was first introduced into medicine in 1884, says: "I have used muriate of cocaine-Boehringer for some time in my practice and have achieved entirely satisfactory results through its physiological action. I found it to be a chemically pure preparation and have never observed any foreign and deleterious effects in its use."

### "Perloids" Registered.

H. Planten & Son, 224 William street, New York, who have attained a wide reputation as makers of empty and filled gelatine capsules, have adopted and registered as a trademark the word symbol "Perloids" as shown herewith, as a designation for



their improved French pearl-shaped capsules. The firm found it necessary to take this measure on account of the many imitations of their products which they state have been placed on the market recently by competing firms. H. Planten & Son will be pleased to supply druggists with literature regarding their "Perloids" or capsules, and application should be made to them at 224 William street, New York.

### The Palmer Trade Mark.

Solon Palmer, the well-known manufacturing perfumer, of New York City, complains of the action of a company doing business in Kansas City as the Palmer Perfumery Co. which he claims has violated his copyrighted trademark and diverted a portion of his business in the West by the use of a label closely imitating that originated by himself. The accompanying cut shows the distinctive trademark of



Solon Palmer. The imitation is alike to all intents and purposes except that the scroll, which, in the genuine mark of Palmer, bears the words "established 1847," is in the device used by the Kansas firm referred to above, entirely blank. Solon Palmer has brought suit in the United States District Court to recover \$10,000 damages and asks the court to restrain the company from further use of the label.

### Beef Tea at the North Pole.

Dr. Nansen, the Norwegian Arctic explorer who is anxious to add to the laurels of his snow-shoe journey to Greenland the fame of discovering the North Pole, started upon his enterprise a few weeks ago. The doctor intends to allow his little craft, the *Fram*, to be carried from the Eastern Siberian coast by a current which he supposes to float past the North Pole, and calculates upon emerging sooner or later somewhere on the Arctic coast of North America. He has laid in provisions for a five years' journey, and was recently in London for the purpose of selecting certain supplies of goods. To Messrs. Cadbury Brothers, of Birmingham, he gave an order for 1,500 lbs. of their cocoa-essence and chocolate in hermetically sealed tins, and, calling upon Messrs. Armour & Co. at their Tooley street warehouse (at the recommendation, we are told, of a leading government analyst), he purchased from them a five years' supply of their meat products. There is, therefore, every prospect (if Dr. Nansen should be successful) that the discovery of the Pole may be celebrated *ad hoc* by drafts of Cadbury's invigorating product and the cheering cup of Armour's extract of beef.

### Vinolia Preparations.

A very important part of a drug business is made up of toilet goods and sundries, and people are naturally inclined to go to the drug store when they are in want of any first-class, superfine article for their toilet table, such as perfumes, toilet powder or creams and toilet soaps. Druggists have recognized this fact and as a rule are generally found to make a good display of the most popular and leading brands of this class of goods, and no doubt have found it profitable to do so. An immense amount of money is spent yearly by the proprietors of "Vinolia" soaps and the other toilet preparations bearing that trade-mark, in order to familiarize the public with their goods and to show them the benefits of a pure, superfatted soap, free from adulteration, in place of using the cheaper soaps which tend to dry or roughen the skin. The many opportunities a pharmacist possesses of recommending to his customers a suitable soap or toilet preparation, oftentimes induces him to pay particular attention to the merits of the goods he is called upon to handle. The question of profit must, however, necessarily enter into the matter and very often there are druggists who have unfortunately declined to look at anything beyond that one point in connection with the buying of their toilet goods. It is therefore pleasing to be able to recommend to the trade "Vinolia" soaps, etc., as Blondeau et Cie. not only claim to have the very finest line of high-class toilet articles, but have in addition arranged their prices in order that the pharmacist may obtain a good rate of profit.

### Illinois College of Pharmacy— Chicago.

The College of Pharmacy of Northwestern University announces that it is now ready to give a two years' course for the degree of Pharmaceutical Chemist (Ph. C.) with the same requirements for admission and graduation as have been established by Michigan University. At the same time, the course heretofore offered for the degree of Graduate in Pharmacy will be continued, requiring attendance upon one junior course and one senior course, each of about twenty weeks, and with the same requirements as to age and practical experience in the drug business as in other colleges of pharmacy.

The next term begins on September 1 and the prospects are that the class will be larger than ever before, which may be partly attributed to the new building in which the school has six magnificent laboratories.

## Notes on Prices.

### Package Prices.

WILLIAM H. RASER, drug broker, 32 Platt street, New York, in his latest price current refers to the fact that there is no material improvement in the volume of business, trade continuing to be light. He says: Opium is in small consumptive demand and values are easy, with cases obtainable at \$2.55, and broken lots at \$2.57½ @ \$2.60. Pure powd. opium \$3.45 @ \$3.50 generally quoted though 25 or 50 lb. lots could probably be secured at \$3.40. Morphia P. & W. in ¼s (in 8-oz. boxes) I offer at \$2.20, and for ½s in 2½-oz. boxes at \$2.15, if unsold. There is very little doing in quinine; foreign in bulk is quoted at 18½ @ 18¾c. as to brand, quantity, etc. Holders as a rule are quite firm, though it is probable that 18c. cash would be accepted in some quarters for a round lot. Citric acid is offered, if unsold, in bbls. at 44c. and kegs at 44½c. Cream tartar powd., pure, from second hands at 20 @ 20½c., if unsold. Ergot reports, unfavorable to the coming crop, reach us from Europe, where the market is now much stiffer than here, but only moderate quantities can be secured in this market at present quotations; tendency is higher. In view of the coming crop, the price for American saffron has become demoralized, German chamomiles are lower. Arnica flowers firmer. Cubebs dull and lower. Shellacs easier. Mannas, all grades, are somewhat lower. Insect powder has been advanced, owing to the higher prices for the flowers. The best grades powder now quoted at 18 @ 20c., as to quantity, etc., and inferior quality at 15 @ 17c. Celery seed firm at 11½ @ 12c. Italian anise scarce and higher. Canary seed, Smyrna, is firmer. Hemp seed, Russian, is held generally at an advanced price, though 2½c. will yet buy. German rape higher at 3 @ 3½c. California mustard seed a trifle lower. Paris green is still scarce in first hands. The manufacturers have not advanced their price from 10c., but they are accepting no orders for spot delivery, and 11c. is the lowest at which it can be secured for immediate shipment, and this from second hands. Pepper, Singapore, has further declined. Cloves are lower. China cassia and cassia buds advancing. Other spices unchanged. Balsam Copaiba lower. Canada balsam fir further declined. Muriate ammonia, lump, ½c. higher. Chloride of lime dull at \$2.10 f.o.b.

### Chicago Prices.

Morrison, Plummer & Co., Chicago, issue their July circular under date 1st inst. In it they refer to the distributive demand as up to the average of the season, but with no large transactions to note. Their further comments on the features of the market are as follows:

Acid, carbolic, is weaker here, though higher abroad.

Balsams, fir, Canada, has further declined to 42 @ 45c. lb.

Blue vitriol is in fair demand and manufacturers ask higher prices.

Bromides, ammonium, sodium and potass., were advanced 2c. by the manufacturers on the 27th ultimo.

Camphor.—Delayed warmer weather has been disappointing to manufacturers, and although this article is now in active demand, prices are weak. In London lower prices are named for forward delivery.

Cocaine, muriate, Merck's, reduced to \$6.25 doz.

Corrosive sublimate in lots of 10 lbs., may be quoted at 66c. lb., and powdered at 76c. lb.

Flowers, chamomile, German.—The bulk of the stock is held in a few hands, and prices are well maintained.

Insect powder is selling below present cost of importation. For next season higher figures are confidently predicted.

Leaves, buchu, short, are again looking up. Jaborandi are about out of market at the moment.

Oils, essential, anise and clove, somewhat lower. The balance of the list shows no change.

Oils, heavy, lard, neatfoot, sperm and tanners, are all lower. Higher prices are predicted for linseed.

Opium.—Offerings of speculators, who are compelled to realize, have further depressed prices. Large holders still have confidence in higher figures, and sell sparingly.

Quinine remains at last quotation, but is dull.

Roots.—Ipecac, is again lower. Orris, in fingers, is scarce and advanced to \$1.50 lb.

Saffron, American, continues to decline. Holders are anxious to unload.

Seeds, canary, recleaned, may be quoted at 3¾c. lb. by the sack. Celery is looking up. Sabadilla, powdered, has reached the extreme price of \$2 lb.

Carlsbad salts.—The price will be advanced to \$8 per dozen on the 10th inst. The agents state that this is made necessary by the increased cost of production. The retail price should be placed at \$1 per bottle.

Silver nitrate.—As we go to press we are advised of decline of 3c. per oz. by the manufacturers.

### Chemicals.

Powers & Weightman and Rosengarten & Sons, manufacturing chemists, Philadelphia, the Allinckrodt Chemical Works, St. Louis, and Charles Cooper & Co., Newark, N. J., in their July price currents note advances in ammonium bromide, bromine, iron citrates, phosphate and pyrophosphate, potassium bromide, quinine citrate, quinine

and iron citrate, quinine, iron and strychnine citrate, silver bromide and sodium bromide. Declines are reported in the following goods:

|                            |                          |
|----------------------------|--------------------------|
| Acetanilid                 | Lactucarum.              |
| Acid, sulphuric, comm.     | Oil of cloves.           |
| Acid, tartaric.            | Potassium citrate.       |
| Ammonium salicylate.       | Potassium cyanide,       |
| Antimony and potass tart.  | fused.                   |
| Caffeine.                  | Potassium cyanide, chem. |
| Caffeine bromide.          | pure.                    |
| Caffeine citrate.          | Potassium sulphide.      |
| Calcium chloride.          | Silver nitrate.          |
| Calcium lactophosphate.    | Sodium acetate.          |
| Calcium phosphate, precip. | Tartar emetic, powdered  |
| Copper carbonate.          | and crystals.            |
| Copper oxide, black.       | Theine.                  |
| Iron chloride.             | Zinc acetate.            |
|                            | Zinc iodide.             |

## Review of the Wholesale Market.

NEW YORK, July 12, 1893.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

The market for drugs, dyestuffs and chemicals continues stationary, scarcely anything having arisen during the week under review to produce features of notable change in the general situation. The jobbing houses report a better supply of orders, but in most instances they have found their customers pursuing a very conservative course in replenishing their stock and assortments, the majority seeking only to provide such quantities of necessary lines that are most urgently required at the moment. Importers and distributors of full packages do not speak of the market in a reassuring way, the general report indicating a slow market with a lack of interest as to quantity lots. The monetary situation is prejudicial to any important increase of business, and general complaint is made of delay on the part of customers in meeting maturing obligations. Prices upon most lines are maintained with firmness, few changes toward a lower basis being announced.

### DRUGS.

ALCOHOL has developed no new features of interest since our last report. The consumptive demand is apparently limited to immediate requirements, and quotations remain at \$2.18 @ \$2.22 as to quantity less the usual rebate.

BALSAMS.—Copaiba continues quiet at previous quotations. Fir, Canada, is still held at \$2.50. Peru is offered at \$1.35, this being an inside figure for what is considered by those in the trade as off goods or of Hamburg origin.

BARKS.—Buchtorn is maintained at the late advance, but is in slow consumptive demand. Cascara Sagrada continues unchanged at quotations. Sassafras is passing out to consumers from first hands at 6½ @ 7c. Cinchona, yellow Maracalbo, has been inquired for to some extent for export, but trade is restricted by the limited quantity obtainable.

BUCHU LEAVES, short, are held at about previous prices, but a decidedly easier tone prevails owing to recent receipt of supplies from primary sources. We quote the range at 8c. to 15c., though the former price might be shaded upon a firm bid.

CACAO BUTTER, Dutch bulk, is maintained firmly at 34 @ 35c. with a moderate jobbing demand at this range.

CAMPHOR continues quiet and from second hands may be obtained down to

48½c. Manufacturers' quotations remain 50 @ 51c. for bbls. and cases respectively.

CANTHARIDES are momentarily neglected at nominally unchanged prices.

CASSIA BUDS are meeting with some attention on the basis of 18c. for prime quality, but higher prices may be shortly looked for.

CASTOR OIL is in good consumptive demand at manufacturers' prices. We quote the range at 14½ @ 15c. for bbls., and 15 @ 15½c. for cases. No. 3 is held at 11½ @ 12c. for bbls., 12 @ 12½c. for cases.

COLOCYNTH APPLES, Spanish, are quiet with the tendency of the market in buyers' favor. Prices range from 22 @ 24c. as to quality. Trieste find sale at 30 @ 38c.

CHAMOMILE FLOWERS, new German, are in better demand with sales reported of 2,500 lbs. best grade at 25c. The range of the market is 22 @ 25c. as to quality. For forward shipments 18 @ 20c. is asked, but the quality at this range is not guaranteed.

CUBE BERRIES are momentarily neglected at the current range of 25 @ 30c. for ordinary, 30 @ 32½ for XX, and 35 @ 45c. for powdered.

DAMIANA LEAVES continue in small supply and held at the full value of 30c.

ERGOT, German, is inquired for and is passing out freely in small quantities at 40c. Spanish continues held at 45 @ 50c.

INSECT FLOWERS, Trieste, are quoted 15c. for spot goods open. Half closed and closed are quoted 19 @ 20c.

LYCOPODIUM is maintained with some degree of firmness at 53 @ 55c., the outside for Politz.

MENTHOL, Japanese, is finding sale at \$3.60, though a lower quotation could probably be obtained on a firm bid.

MANNA, large flake, is in improved position, and scarce at \$1.10; small flake is quoted 42c., and sorts 35 @ 36c.

MORPHINE, P. and W. brand, is a trifle firmer from second hands, but manufacturers' prices can yet be shaded, say to \$2.25 for eighths, and \$2.00 for ounces.

OPIUM continues inactive, and there appears to be no disposition on the part of holders to realize at concessions; the lowest open quotation for cases is \$2.40. Single cases are offered at \$2.45, and jobbing purchases can readily be made at \$2.50. The price for powdered remains \$3.40 @ \$3.45.

QUININE has received little attention during the week under review; the demand is said to be much under the usual proportions for this season of the year, but prices are nominally unchanged, foreign in bulk being quoted at 18 @ 18½c. as to quantity and brand. Speculative interest is lacking purchases only being made in accordance with necessities.

SAFFRON, American, is maintained firmly at 35 @ 40c. with the available supply closely concentrated.

SENNAS are in demand and we are reported sales of 1,500 lbs. garbled Alexandria on p. t., and 1,000 lbs. Tinnevely 10 @ 13c.

VANILLA BEANS continue in good jobbing demand and are firm at quotations.

#### DYESTUFFS.

CUTCH continues dull with the quotation nominally 4½ @ 5c. for SM.

GAMBIE is in an unsettled condition with sales reported at 4.15c. Forward shipments are quoted at 4.20c. per sail, 4½c. per steam. Among recent transactions we are reported sales of 150 tons per sail at 4c.

DIVI DIVI is easier owing to a recent liberal arrival. Sales are reported of some 15 tons at \$50. The range of the market is \$50 @ \$55.

NUTGALLS, Blue Aleppo, are inquired for at 14 @ 14½c., a recent transaction being 40 bags at a shade under 14c.

SUMAC, Sicily, is maintained steadily at \$72.50 @ \$77.50 and small sales are making within this range. Virginia is quoted \$43 @ \$47.50 as to quantity.

#### CHEMICALS.

ARSENIC, white, is finding sale at 3½ @ 3¾c. The available stock is small and the range quoted is maintained firmly.

ALUM continues in steady, moderate request with sales at \$1.75 for lump and \$1.85 for ground.

AMMONIA, carbonate, is firm at the recent advance to 8½c. for English and 8c. for domestic. Some German upon spot offers at 7½c.

BLEACHING POWDER is dull though prices are without quotable change.

BORAX is neglected momentarily at nominally unchanged prices.

BLUE VITRIOL continues in steady, moderate request with the sales within the range of 2¼ @ 2½c.

CHLORATE OF POTASH has sold freely during the week at 15c. for German and 15½c. for English.

CREAM OF TARTAR has been reduced by manufacturers to 19½c. for crystals and 20c. for powdered which brings the price down to that from second hands.

CARBOLIC ACID is in unchanged position. The demand is limited and the market continues dull.

NITRATE OF SODA can be obtained in instances down to \$1.65 when purchased in the large way, though for carload lots up to \$1.75 and \$1.80 is asked.

NITRATE OF SILVER is maintained firmly at 50 @ 51½c. as to quantity.

SAL SODA is held in firm position and for domestic makes \$1.03 is now required less the usual discount. Foreign is now quoted \$1.07½ @ \$1.10.

TARTARIC ACID, both crystals and powdered, are offered by outside parties at 23½c. Manufacturers' quotations remain 23½ @ 24c. for the two varieties.

#### ESSENTIAL OILS.

ANISE continues to offer in a small way at \$1.37½ @ \$1.40.

BERGAMOT, Cajeput, and CUBE remain quiet though previous prices are steadily adhered to.

CASSIA is firmly held at the range of 80 @ 85c. with numerous jobbing transactions.

CLOVE is dull but the lowest open price is 55c.

GERANIUM is finding sale at \$4.50 @ \$7.50 as to quantity, quality and brand.

NEROLI is in firmer position due to strong advices from abroad. The range of the market is given as \$28 @ \$38.

PEPPERMINT is not meeting with much attention, some few export orders are in the market for HGH, but the ideas of foreign buyers are about \$2.65, whereas local holders are unwilling to shade \$2.75. Wayne County is held at \$2.60 @ \$2.65 and Western at \$2.45.

SASSAFRAS is maintained at 36 @ 38c. for natural and 24 @ 27c. for artificial.

WINTERGREEN, natural, continues held at \$1.65 @ \$1.70 as to quality, quantity and brand.

#### GUMS.

ACACIA of the different varieties continue very quiet, though without quotable change in price.

ASAFETIDA is generally held at 15 @ 16½c. for Calcutta and 12½ @ 15c. for London.

ALOKS remain dull and neglected but without important change in price.

CHICLE continues dull and may be obtained down to 38c.

GUAIAC is passing out in small quantities to consumers at 20 @ 25c. as to quality.

KINO is firm at 30c. with a moderate jobbing business reported.

MASTIC is scarce and the market is firmer in tone with 65 @ 70c. asked.

SHELLAC is in limited consumptive demand, speculative interest being apparently suspended at the moment. Importers are maintaining values with considerable steadiness being encouraged by the continued firmness cabled from primary sources. DC upon spot is held at 30 @ 31c.

TRAGACANTH sold lower in London during the past week, but without effecting the position of the article in this market. There is a limited demand at 43 @ 63c. as to quality.

#### ROOTS.

GINGER, Jamaica, is in moderate demand with sales of bleached at 15 @ 18c. and unbleached 14 @ 17c.

GINSENG is dull, but \$2.50 is quoted as an inside price.

IPERCAC continues to offer at \$1.30 @ \$1.35, but the transactions are confined almost wholly to jobbing quantities.

GOLDEN SEAL is in good supply at a figure equivalent to 20c. laid down. The jobbing price of old stock remains 21 @ 22c.

JALAP is passing out in moderate quantities to consumers at the range of 22 @ 24c. as to quality.

ORRIS, Florentine, is jobbing fairly and among recent transactions we note a sale of 1,000 lbs. at 24c.

SARSAPARILLA, Mexican, has been inquired for and is jobbing fairly at 8 @ 8½c. as to quality.

SQUILLS are firmer abroad and the lay down cost is now about 4½c. for prime.

#### SEEDS.

ANISE, Italian sifted, has declined 9 @ 10c.

CARAWAY, Dutch, is firmer, holders being unwilling to shade 6c.

CELERY has advanced to 12c. and is firmly maintained at the figure quoted.

CORIANDER is in steady moderate request with sales of bleached at 3½c. and unbleached 3c.

FENNEL, German, has been offered at 10 @ 10½c. and a weaker tone prevails.

HEMP, Russian, is well sustained at 2½c.

MILLET is inquired for and the market is stronger in consequence. We quote the range from 1¼ @ 1½c.

MUSTARD is dull and the market is easier in tone. California yellow can now be purchased at 6½ @ 7½c., and brown 3½ @ 4½c. as to quality. Bari and Trieste, brown, offer at 5½c. spot and new crop for July and August shipment 5c.

RAPE, German, is held at 3½c. with jobbing sales at this figure. English continues held at 3 @ 3½c.

# American Druggist and Pharmaceutical Record.

A JOURNAL OF PRACTICAL PHARMACY.

VOL. XXIII. No. 3.

NEW YORK, JULY 20, 1893.

WHOLE No. 256.

## AMERICAN DRUGGIST PUBLISHING COMPANY.

37 COLLEGE PLACE, NEW YORK.

A. R. ELLIOTT, PRESIDENT.

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If paid in advance direct to this office, 1.50  
" " for Foreign Countries, - - - 2.50  
Single Copies, - - - - - .15

The "American Druggist and Pharmaceutical Record" is issued on Thursday of each week. Changes of advertisements and all copy for publication should be received before Tuesday of each week.

We are not responsible for any money paid to agents. All remittances should be made direct to this office. Express Orders, Post-Office Orders and Drafts on New York should be made payable to the "American Druggist Publishing Company" and addressed to them at 37 College Place, New York.

*Liberal Commissions to Club Agents.*

Members of the American Pharmaceutical Association and pharmacists in general throughout the country will be grieved to learn of the serious illness of Prof. JOHN M. MAISCH, secretary of the A. P. A. and professor of materia medica and botany in the Philadelphia College of Pharmacy.

## FOR THE EXPOSITION.

SELDOM has the promise for a large and successful meeting of the American Pharmaceutical Association been better than it is for this year. Already nearly a hundred pharmacists from New York and vicinity have signified their intention of joining the excursion outlined on another page, which has received the official commendation of the transportation committee of the American Pharmaceutical Association. The advantages accruing from going in a body are numerous, and not the least of these is that in nowise is acquaintanceship so quickly or agreeably formed as in travel, and this is especially true where a community of purpose and pursuits exist, as will be the case in this instance.

The route selected has the advantage that it offers attractions not only to those from the immediate vicinity of New York but also to those from New England, from Philadelphia, from Baltimore and from Washington, and it is anticipated that each of these sections will be well represented.

## PRESCRIPTION PRICES.

THE publication in our issue of June 22 of an article by GEO. E. CUTTS has been the means of directing attention anew to an old grievance among druggists. We have reference to the want of uniformity in the methods pursued by different druggists in the pricing of prescriptions. C. S. INGRAHAM, of Elmira, who is well-known to the pharmacists of this State, takes a common-sense view of the subject in his article on a "Uniform Price Scale for Prescriptions," which we print on another page. He believes that the price scale suggested by MR. CUTTS is well adapted for general use, but is of opinion that the adoption of a universal price mark is of equal, if not of greater, importance. The simple suggestion which he offers with regard to securing uniformity in marking prescriptions, should find ready acceptance with pharmacists, and it is to be hoped that the matter will not be allowed to rest here, but receive its full share of discussion among other subjects of practical value to the pharmaceutical profession of this country at the approaching meeting of the A. P. A.

## NATIONALISM IN SOUTH CAROLINA.

IT is strange to note that a State, where the robes and mace of the colonial period still make their appearance in the courts of law, should be the pioneer in adopting the most advanced teachings of nationalism, and stranger still that it should be the farmers, usually the most unflinching adherents to conservatism, who mold the State policy in this direction.

South Carolina is this State and the liquor law which went into effect on July 1 is the form in which this nationalism appears.

Unfortunately for the pharmacists of that State and for the doctrine of nationalism as expounded by its ablest and most enthusiastic upholders, this law is apparently so full of defects that the people at large and pharmacists in particular may be much annoyed by it, while its imperfections and no doubt abortive operation will be cited as the best evidence of the folly of nationalism in general. The constitutionality of the law has been questioned, however, and an adverse decision on that point been rendered, and it may be that this decision, if sustained, will relieve the pharmacists from the unfortunate position which the passage of the act placed them in.

*Written for the American Druggist and Pharmaceutical Record.*

## UNIFORM PRICE SCALE FOR PRESCRIPTIONS.

By C. S. INGRAHAM.  
Elmira, N. Y.

The following prescription was recently brought to my store to be filled:

|                              |         |
|------------------------------|---------|
| Acid. hydrochlor. dil.....   | 3 iiss. |
| Liquor. arsenical chlor..... | 3 i     |
| Tr. capsicum.....            | 3 ss.   |
| Tr. cardamom. comp.....      | 3 iiss. |

Sig. One teaspoonful in water after meals.

(Signed) Dr. Wallace.

Seeing on the envelope inclosing the prescription the price some sensible druggist had put there, I charged the customer the same rate.

On receiving the package he said, "I am amused at the different prices put on that medicine by druggists. I have been charged almost all prices between 35 cents and 75 cents for it. Don't you have any regular prices for your goods?"

I answered him in a way which seemed to satisfy him, but it did not satisfy me. *Query:* How can we bring about a reform in this matter, so that something like uniform prices may be obtained for prescriptions, especially copies or tramp prescriptions?

This "query" was prepared with others for discussion at our association meeting at Lakewood this year, but for certain reasons was not brought forward. Since the meeting I have read Mr. Cutts' prize article in the *DRUGGIST AND RECORD*, and beg leave to offer the following remarks:

The price scale suggested by Mr. Cutts is about as near the mark as it well can be, perhaps, and for ordinary store use will suit most of us. The *really important* thing is the price mark for copies or originals returned to the customer. Every pharmacist should put the price in plain figures on the face of every copy or original prescription that goes out of his store and the price also on the *back* of the same prescription in Roman numerals. Thus every prescription would bear a silent message of peace and good will, fraternal kindness, etc., to his brethren in the following form: 50c. (face value); *back* endorsement, in one corner if you please, L.

The position of these marks would be immaterial, as the observant eye of the dispenser will detect them readily enough. Then the smart customer should lose his occupation of altering the face value of the prescription by changing the figures, for having changed the figures in his favor on the face of the prescription, he would never stop to observe the check mark on the back or bottom of the prescription. Being perfectly content with his own shrewdness he would put it away in his pocket chuckling over the little game he would come on the next druggist.

Any alteration in price would be detected by this means and the pharmacist be protected from unjust and damaging charges of extortion or excessive profits from an all too credulous and already too suspicious public.

That a uniform scale price for prescriptions is not in use to-day is owing to the entire lack of shrewd business methods and coöperation on the part of the retail drug trade. Mr. Cutts says "there is such a want of fealty and trust," which is only another way of stating the condition of affairs. Doctors, undertakers, lawyers, barbers, bankers, butchers, plasterers, clothiers, manufacturers, wholesalers, retailers, peddlers, in fact almost everybody else, coöperate. But the pharmacist, alas! He disintegrates, stagnates and exhib-

its the most stolid indifference to such grave matters as the present suffering condition of the important branch of industry over which he is called to preside.

Times have changed. Everything has changed but the druggist. I once heard the druggist called "a sleepy fellow," but I could not then imagine why. Can any of our friends explain?

Considering the change that has come over the world during the past few years we ought to see the need, in fact, the necessity, of coöperative council, a close study of the changed condition of things, especially in relation to their bearing upon the work we have in hand.

The man who came to me with that prescription from Dr. Wallace knows far more of what is going on in the world than we do and cannot fail to see in this unbusiness-like way of conducting our affairs several back numbers.

Who will second an effort to secure this very small advance upon our old methods by the adoption and use of this simple plan of pricing the prescriptions, that go meandering over the earth?

## How Sulphate of Morphine is Made.\*

By J. CALVERT, Ph.C.

At the session of the A. P. A. held in San Francisco in 1889, I gave an account of how the Chinese prepare smoking opium.

I now purpose to tell you how sulphate of morphine is prepared, as we see it in the vials furnished to us by the American manufacturers.

Some years ago I was asked by William Geary, formerly of Redington & Co. and now of the firm of Kirk, Geary & Co., of Sacramento, to investigate certain matters regarding opium, among others, the manufacture of sulphate of morphine. The principal condition of Mr. Geary was that the product should conform to the appearance and bulk of that of the product of Powers & Weightman. I worked on the problem for half a year, and at last gave it up, as I saw no solution of it. Then Mr. Geary told me that he had certain information about a German chemist whose name I forget, who could give some notes on the subject. We wrote to him, and his reply exactly confirmed what had been told to me by my former partner, Professor Emlen Painter, as to what he had seen in Philadelphia in 1876, and which I thought at the time to be merely samples for exhibition—that is, *bricks* of morphine sulphate, perfectly white, and solid. He saw these *bricks* in the office of Powers & Weightman and when he told me of them I was amazed, as the only way in which I could imagine sulphate of morphine to be made was by simple solution and crystallization.

In the preparation of sulphate of morphine there are two things to be considered: first, decoloration; second, form of product; and in order to give an idea of the whole process it will be necessary to commence with the raw material.

Opium in any quantity is exhausted with water. The resulting liquid is precipitated with an alkaline base, and crude morphine is the result. The crude morphine is taken up with sulphuric acid and water filtered through animal charcoal and brought to a density of  $4\frac{1}{2}$  to 5 B. The crystallizing apparatus is a leaden tank, about six inches in depth, of any size to correspond with the amount of morphine sulphate. It is hinged on a frame and has an outlet, with a plug or faucet at the lower end for drainage. The solution being ready and the apparatus adjusted, the hot solution is run into the crystallizer.

\*Read at the Semi-Annual Meeting of the California Pharmaceutical Society, May, 1893.

The solution is stirred gently every few minutes until crystals commence to form on the surface, and then, carefully stirring, when the solution has come to the right temperature, the morphine sulphate crystallizes suddenly into a solid mass.

The mass of crystals is allowed to repose for 48 hours, the plug at the lower end of the tank is removed and the mother liquor is allowed to run off, at first slowly, and afterward, by elevating the apparatus, the last of the liquor is removed. The drainage requires several days.

The crystals in the apparatus are then cut up into pieces of the shape of bricks, (commencing at the upper end,) which are placed on an absorbent, and removed to a drying room.

Now comes a singular part of the process.

In ordinary crystallization a certain part of the coloring matter is retained in the crystals. In this case, when the morphine is crystallized as described, and dried in bricks, nearly all the retained coloring matter comes to the surface, so that when the bricks come out of the drying room the surfaces are brown, and in some cases almost black, showing that the coloring matter is eliminated. The next part of the process is to remove the colored part. This is effected by slicing off the dark portions, leaving the morphine sulphate perfectly white. The masses of crystals of sulphate of morphine (which I have heretofore described as bricks) are in a condition to be made into a merchantable article.

A very sharp knife and delicate hands will do it. The bricks are placed on a table and slices are cut off them (about  $\frac{1}{4}$  in. each). These slices are gently crumbled in the hands (very gently). Thus they will accommodate themselves to the capacity of the usual bottles of the trade.

**Pill-coating.**—M. Fauël communicates the following method for pill-coating to the *Pharm. Weekblad.*

The pills are uniformly moistened with a liquid composed of one part of glycerin and two parts of strong alcohol; they are then rolled in a sufficient quantity of impalpable powder, composed of saccharin, 4 parts; gum tragacanth, 2 parts, and potato starch, 1 part. Remove the excess of powder by means of a sieve, and repeat the operation. To have the pills white, they are then moistened with glycerin, 1 part; ether, 2 parts, and rolled in a powder composed of equal parts of talc and carbonate of calcium. The following are the author's formulas for respectively cacao and gelatin coating: I. Cacao, 2 parts; saccharin, 2 parts, and gum tragacanth, 1 part; II. Gelatin, 11 parts; saccharin, 5 parts; distilled water, 24 parts.

**Cathartic Acid.**—Gensz points out that the usual results obtained in the extraction of this body from senna leaves are not correct. Kubly's experiments yielded only 2 grammes from 2 kilos. of leaves. But the amorphous substance he obtained was blackish and of uncertain action, and Stockman gives an account of a much yellower preparation. The author gives as his process the following: Two kilos. of senna leaves, not powdered, are treated with hot water for 24 hours and pressed. The extract is evaporated in vacuo. The residue is mixed with an equal volume of 95 per cent. alcohol and well shaken occasionally for a day. The soluble portion is taken off, and the treatment repeated with a fresh quantity of alcohol. The filtered solution is now treated with neutral acetate of lead. The precipitate is worked well and mixed to a thin paste with alcohol, and then treated with  $H_2S$ . Excess of  $H_2S$  is driven off by exposure to the atmosphere. After drying the residue, the sulphide of lead is treated with alcohol. The alcoholic solution is filtered off and

mixed with ether, which precipitates the acid as a golden yellow powder. After drying this, it is re-dissolved in alcohol, filtered off, and dried once more at  $50^\circ C$ . If further purification is needed, it can be dissolved in 40 per cent. alcohol and precipitated again with ether. Thus obtained, in an apparently pure state, the yield is 12 to 15 grammes from the two kilos. It is an amorphous powder, of a yellow color, soluble with difficulty in cold, but easily in hot water, and easily so in 30 per cent. alcohol. It is insoluble in ether, benzene, chloroform, and petroleum ether. It leaves no ash, and an elementary analysis assigns to it the formula  $C_{12}H_{11}NO_{11}$ . The author puts forward this formula, however, with reserve, and admits the possibility of the body being obtained in the future in a crystalline, and therefore purer state.—*Pharm. Post. through Br. and Col. Drug.*

**Determination of Fatty Oils in Mineral Oil.**—According to J. Klimont (*Chem. Zeit.*, 1893, xii., 543) fifteen grms. of the oil which is to be examined for the presence of small quantities of fatty oil should be saponified in a flask, holding about 400 c.c., with 100 c.c. of an alcoholic solution of caustic potash (not soda), by boiling under a vertical condenser for one or two hours. The contents of the flask are then diluted with an equal bulk of water and filtered through a wet filter. The residue of mineral oil is well washed, the filtrate exactly neutralized with hydrochloric acid, allowed to stand in a separating funnel until thoroughly cold to get rid of any remaining mineral oil, and then extracted with petroleum ether to complete the removal of the unsaponified portion. The aqueous liquid containing all the fatty oil as soap is concentrated to 100 c.c., precipitated with a solution of calcium chloride, and the resulting lime soap collected on a weighed filter, washed with the least possible quantity of cold water, dried and weighed. It is then ignited, and the residual lime weighed again, giving the fatty acids. These can be calculated to glycerides by adding the weight of the glyceryl radicle displaced by the lime; the necessary value being obtained by multiplying the weight of the  $CaO$  found by 0.774. The process is adapted for the determination of small percentages of fatty oils, e.g., under 5 per cent., but is not suitable for larger amounts, as the lime soap incloses a good deal of potassium chloride and calcium chloride and cannot be satisfactorily washed.—*The Analyst.*

### Finger Prints as a Means of Identification.

Francis Galton, F.R.S., has just issued a supplement to his book on "Finger Prints." He has now had an opportunity of comparing some finger prints obtained from natives in India in 1878 with those of the same natives taken last year, and therefore at an interval of fourteen years. Many such impressions were taken from natives of India by Sir William Herschell and some of them have been preserved. The method of taking the finger prints in 1878 proves to have been much less satisfactory than the plan adopted more recently, for some dye was used in the former instance, while Mr. Galton recommends a thin layer of printers' ink. The outcome of the comparison of the two sets of impressions is strongly in favor of the persistence and unchangeability of the ridges, for there were absolutely no points of disagreement even when compared under sevenfold enlargement. Mr. Galton has been informed that the practice of taking the impression of a single digit of criminals is now constantly adopted by the Bengal police. It is clear that it is a very valuable aid to identification of an individual.

# News and Notes.

## EXCURSION TO THE WORLD'S FAIR.

The committee on transportation of the American Pharmaceutical Association, through the chairman, Thos. F. Main, has issued the following official circular relating to rates, etc.:

[Official Circular.]

### Committee on Transportation.

American Pharmaceutical Association,  
NEW YORK, 20th July, 1893.

DEAR SIR: The forty-first annual meeting of the American Pharmaceutical Association will be held in Chicago the week beginning August 14.

The Committee on Transportation report the following as being the best rates at present obtainable:

#### NEW YORK.

Excursion rates from New York to Chicago are: New York Central and Pennsylvania Railroads, \$32.00; Lake Erie and West Shore, \$28.80. These are limited tickets on thirty-five hour trains only. The Baltimore & Ohio Railroad have offered a rate of \$28.00 from N. Y., Philadelphia, Baltimore and Washington, via the Alleghenies and the far-famed Blue Ridge by daylight, going and returning same route, or going B. & O., and returning via Niagara Falls, where a "stop-over" will be permitted. Tickets are good until Nov. 15, and from the Falls members will have a choice of four routes returning. Members from Philadelphia, Baltimore, and Washington who do not desire to stop over at the Falls can obtain a direct return ticket over the B. & O., for \$27.60. In the event of a lower rate being authorized prior to the departure of members on August 11, tickets will be furnished at such lower rate. As this route will accommodate members from the points above mentioned, the Committee recommend it. Should the party going number 125 or more, a special train will be furnished for their accommodation, the itinerary of which would be as follows: Leave foot of Liberty street, N. Y., August 11, 11 P.M., arriving in Washington 6 30 A.M., next morning, leave 11.50 A.M., reach Grafton, O., in time for supper, 8.30 P.M., Garret, Ind., next morning, 7.30 A.M., and arrive in Chicago about noon, Sunday, August 13.

Arrangements will be made in Washington for breakfast at the Ebbitt House and cabs will be furnished at reasonable rates for a three hours' drive about the city.

Members from Philadelphia and Baltimore desiring to travel with this party can go to Washington the previous day or take train leaving Philadelphia 8.15 the morning of the 12th, reaching Washington in time to make connections.

Mr. Luther F. Stevens, 141 Baltic street, Brooklyn, has the matter of sleeping car arrangements in hand, and those desiring to accompany the A. P. A. party will send him check for \$5.00 as soon as possible to reserve berth. Sleeping car accommodations are *extra* in all cases and not included in any rate mentioned in this circular.

#### BOSTON.

The excursion fare over the Boston & Maine Railroad, via Montreal, is \$29.60. The Baltimore & Ohio Railroad make a rate of \$30.40 by Fall River boat or railroad to New York, and thence via Washington with New York party, returning by Niagara Falls. For further particulars inquire of their agent, Mr. A. J. Simmons, 211 Washington street, Boston, and for sleeping car accommodations send check as above to Mr. Stevens, Brooklyn.

#### ATLANTA.

Flat rate of one and one-third fare over all roads.

#### NEW ORLEANS.

The lines from N. O. have all agreed upon a one and one-third fare.

#### ST. LOUIS.

\$14 the round trip.

#### CINCINNATI AND DENVER.

No arrangements have been made for less than fixed rates, but it is probable that a one and one-third rate will be obtained from both points.

#### SAN FRANCISCO.

World's Fair rate of \$100 from common points in California, stop-over privileges west of the Missouri River.

Rooms in Chicago for \$1 a day and upward can be obtained by addressing Henry Biroth, local secretary, 111 Schiller Building. Any special information desired in regard to any particular section, will be cheerfully furnished by the member of the committee in your locality.

[Signed]

The Committee on Transportation,  
Thomas F. Main, Chairman, N. Y.  
Harry Sharp, Atlanta, Ga.  
S. A. D. Sheppard, Boston, Mass.  
A. E. Ebert, Chicago, Ill.  
W. J. M. Gordon, Cincinnati, O.  
Chas. M. Ford, Denver, Col.  
A. K. Finlay, New Orleans, La.  
M. W. Alexander, St. Louis, Mo.  
Wm. Searby, San Francisco, Cal.

It will be noted that choice of return routes is given, but this selection must be made at this end of the line, the entire ticket being made out at the place of purchase.

Make sure of notifying Luther F. Stevens, 141 Baltic street, Brooklyn, in time to secure sleeper accommodations.

## Pharmaceutical Association Meetings.

### MONTHLY CALENDAR.

| Date.     | Association.        | Place of Meeting. |
|-----------|---------------------|-------------------|
| Aug. 8... | Montana .....       | Helena.           |
| " 8...    | North Dakota.....   | Fargo.            |
| " 8...    | Wisconsin .....     | Fond du Lac.      |
| " 9...    | North Carolina..... | Greensboro.       |
| " 10...   | Georgia.....        | Rome.             |
| " 10...   | Illinois.....       | Chicago.          |
| " 14...   | A. P. A.....        | Chicago.          |
| " 15...   | South Dakota.....   | Yankton.          |
| " 27...   | Int. Congress.....  | Chicago.          |

### Missouri Association.

The Missouri Pharmaceutical Association held its 15th annual meeting at Excelsior Springs, June 13-16. This, the crystal anniversary, witnessed the largest attendance in the history of the association, 323 members and visitors being present. Of this number 179 were from Kansas City, and about 75 from St. Louis.

Fifty-six new members were elected, which increases the list to 1,200.

President G. H. Chas. Klie, of St. Louis, delivered an able and characteristic address touching on numerous topics of the times.

Numerous delegates from other States were present. Among them were James Reed, of Nebraska City, Neb.; Mrs. J. M. Crissey, Omaha, Neb.; A. V. Pease, Fairbury, Neb.; S. C. Wilson, Lincoln, Neb.; J. O. O'Reilly, Kansas City, Kansas; Mr. Hettinger, Wichita, Kansas; Dr. Lee Hatch, president of the Illinois State Pharmaceutical Association; Thomas Knoebel, East St. Louis, Ill.

Treasurer Gus. J. Meyer's report shows a balance of \$109.56.

Mayor C. P. Walbridge, of St. Louis, addressed the organization, and spent three days at the convention.

F. W. Sennewald, secretary of the Missouri State Board of Pharmacy, stated that the board was doing its utmost to enforce the law and give practical examinations. The association unanimously recommend Mr. Sennewald to the governor for re-appointment to his position, as his term of office expires in July.

The committee on legislation reported through A. Brandenberger, of Jefferson City, and recommended that another effort be made to amend the pharmacy law. The association endorsed the suggestion.

The election of officers resulted as follows: President, William Mittelbach, Boonville; first vice-president, A. Brandenberger, Jefferson City; second vice-president, W. M. Fedderman, Kansas City; third vice-president, Leroy Farmer, Lexington; treasurer, E. G. Orear, Breckenridge; secretary, Dr. H. M. Whelpley, 2342 Albion Place, St. Louis; assistant secretary, W. C. Waldeck, St. Louis; local secretary, C. L. Cravens, Excelsior Springs; council, S. A. Howard, Kansas City; G. H. Chas. Klie, St. Louis; A. F. Fleischman, Sedalia; R. H. Sweeney, Ash Grove; A. T. Mosley, Harrisonville.

The Missouri State Pharmaceutical Travellers' Association, which is a branch of the M. S. P. A., elected the following officers: President, E. G. Orear, Breckenridge; first vice-president, W. D. Hussung; second vice-president, William Wakefield, Kansas City; third vice-president, F. E. Meadows, St. Joseph; secretary and treasurer, A. S. Forker, Sedalia.

Professor Francis Hemm made a display of syrups manufactured in accordance with the U. S. P., 1890.

Dr. C. O. Curtman accompanied his paper on dioxide of hydrogen with demonstrations.

The microscopical exhibition was one of the features of the convention.

The following deaths were reported: W. M. Stribley, Hugo Frielingsdorf, A. O. Smith, C. C. Ferris, J. H. Teenor.

The following papers were read and discussed: Sensitive Iodine Preparations, by G. H. Chas. Klie, Ph.G., St. Louis; The Relation of Specific Gravity to Atomic Weight, by A. N. Doerschuk, Kansas City; Thirty-five Years a Druggist on the Missouri, by A. Breunert, Kansas City; The Druggists' Catechism, by C. E. Corcoran, Kansas City; A Good Pharmacist—A Better Physician, by J. C. Falk, Ph.G., M.D., St. Louis; With Our Medical Friends, by William Mittelbach, Ph.G., Boonville; Formulæ for Syrup Hypophosphite Compound, by Francis Hemm, Ph.G., St. Louis; Fifty Health Hints, by H. M. Whelpley, M.D., St. Louis; Some Objectionable Prescriptions, by J. M. Good, Ph.G., St. Louis; Historical Sketch of the Past Fifteen Years, by Fred. R. Dimmitt, Kansas City; Twenty Minutes' Talk on How to Study, by Dr. H. M. Whelpley, St. Louis; Notes on Hydrogen Dioxide, by Dr. Charles O. Curtman, St. Louis (illustrated with volumetric estimations).

The association decided to offer prizes for papers and special exhibits at the next meeting. These will be announced by the secretary at an early date.

President Mittelbach announces the following as chairmen of committees: Trade interests, G. J. Meyer, St. Louis; papers and queries, J. C. Falk, St. Louis; legislation, A. Brandenberger, Jefferson City; pharmacopœia, Dr. C. O. Curtman, St. Louis; national formulary, Prof. Francis Hemm, St. Louis; deceased members, P. H. Franklin, Marshall; drug adulterations, Dr. C. C. Hamilton, Kansas City; entertainment, F. W. Sihler, Kansas City; membership, A. S. Forker, Sedalia; attendance, W. P. Huckle, Kansas City; microscopy, Dr. H. M. Whelpley, St. Louis; transportation, G. H. J. Andreas, St. Louis.

The next meeting will be held at Excelsior Springs, June 12-15, 1894.

Although the scientific work was large and the discussions interesting, the entertainments were a prominent feature of the meeting. F. W. Sihler, of Kansas City, chairman of the entertainment committee, succeeded in getting up the most extensive and satisfactory programme ever presented.

### Annual Meeting of the National Wholesale Druggists' Association.

President James E. Davis, of the National Wholesale Druggists' Association, wishes the announcement renewed that the annual meeting of the association will

take place in the city of Detroit, Mich., on September 11 to 14 inclusive. Chairman William O. Allison, of New York rates and routes committee, will in a short time issue a circular giving full information as to routes and the terms obtained for those attending the meetings. The meeting this year promises to be of more than usual importance.

### Meetings of Boards of Pharmacy. JULY.

18, Minnesota—  
19, South Carolina—  
20, New Jersey—Newark.  
26, New Hampshire—

#### AUGUST.

1, Iowa—Davenport, Bloomfield, Oskaloosa and Des Moines.  
1 and 15, Maryland—Baltimore.  
9, Arkansas—Little Rock.  
9, Nebraska—Grand Island.  
9, Georgia—Rome.  
10, Louisiana—New Orleans  
11, North Dakota—Fargo.  
11, Wisconsin—Fond du Lac.  
15, New Jersey—  
15, Ohio—Toledo.  
29, Michigan—Marquette.

GEORGIA BOARD.—The Georgia State Board of Pharmacy will meet in Rome, August 9, to examine applicants for registration. After the examination the board will meet with the Georgia Pharmaceutical Association, and both expect to go in a body to attend the meeting of the American Pharmaceutical Association in Chicago. Those who intend to present themselves for examination should notify the secretary, Dr. Henry R. Slack, La Grange, Ga.

MONTREAL BOARD.—The Board of Examiners for the preliminary examination held their quarterly meeting in the Montreal College of Pharmacy, 595 Lajanchetiers street, on Thursday, July 6, when thirty-six candidates presented themselves, and of these the following passed on all subjects, namely: Louis Rogalsky, Harry Smith, E. Clement, Jas. W. Elcome, C. A. Brault, F. Mariotti, W. F. Roach, H. Brazier, J. P. Cassegrain, O. Tourgeon, and A. Gadbois. The following candidates failed on arithmetic, and will be required to present themselves at the next examination to be examined on that subject only:—E. Thivièrge, Geo. Virolle, and A. R. Webb. The remainder of the candidates have been referred back for further study, and will be required to take up the whole examination when presenting themselves again.

The examiners were Wm. S. Kerry, Ed. Giroux, Jr., C. E. Scarff. The next examination will take place on October 5, and all candidates must file their applications with the Registrar at least ten days before the date of examination.

## CORRESPONDENCE.

### As to Chicago Methods.

About ten years ago ten public spirited druggists called "the famous ten" covered themselves with glory and did incalculable good by bringing about the 'Druggists' Permit,' which saved the druggists directly \$250,000, and had the contemplated \$100 license gone through, just \$1,000,000, besides assisting decent pharmacy by putting a stop to saloon practices. But "the famous ten" reaped more ingratitude than appreciation and very likely would not go through the ordeal again, and I am afraid a

great many druggists have lapsed back to former ways, but hope your appeal for honesty will have the right effect.

With regard to legislation—I would say the less the better; we have had too much already.

You also touch cutting in your able editorial. I am cutting myself and no one can reproach me for so doing. I am certain no one in my place would stand idly by if he saw cheap John places draw away from him his patent medicine trade and he himself see his legitimate trade suffer. However without desiring to argue the question I shall follow that policy that to my mind suits my case best. J. C. CHICAGO, ILL.

### Don't Close on Sunday.

While it happens that I am not a pharmacist I unfortunately have to patronize one and I hear him complaining about long hours. He wants to shut up his store at 8.30 each evening and to shut it up on nearly the whole of every Sunday, and he growls because I can't agree with him that this would be the correct thing to do.

Sickness has no hours off, the cramp colic don't put off its call until office hours. I've seen men have the toothache, even felt 'em have it as late as 11 P.M., and have even seen a case of chills before breakfast. No, the druggist has got to stand by us. We don't want to sit around on the steps with a jaw big as a college boy's conceit for 'steen hours to wait for the 9.30 A.M. office hours.

JAMES JOHNSON.

#### SLEEPY HOLLOW.

### Modern Methods of Poisoning.

The Dr. Henry Meyer, of Detroit, Mich., who has been indicted on a charge of murder formerly conducted a patent medicine bazaar in Chicago. He is charged with a number of murders by poisoning for the sake of recovering life insurances—"cemetery insurance methods" is how the Chicago people style the charges brought against Dr. Meyer.

His arrest brings up the modern aspect of poisoning in an interesting way. In at least one case it is said that antimony was detected in the intestines of a victim. This use of the mineral in the familiar form known as tartar emetic is not new. Adroitly administered, it produces death with the symptoms characteristic of cerebro-spinal meningitis. Furthermore, some of the tests for antimony are simulated by other substances liable to be found in the intestine. Hence, if the material submitted for analysis be but small in amount, it has happened that the analyst has used it all up before he has exhausted the series of reactions that prove the presence of antimony by excluding every alternative hypothesis.

Should the poison used happen to be of the ptomaine orders, it will not respond to chemical analysis. A ptomaine is itself a product of animal substances. As such it contains no element foreign to the animal body in its normal state. Hence chemical analysis of the intestines of persons killed by a ptomaine poison can disclose no element foreign to the human body.

A third possible agency of poisoning is inoculation with the cultures of morbid germs. Thus the germs of glanders or woolsorter's disease or perhaps cancer

could be planted and left to do their work. Of course, any one of more familiar diseases could be set up. The use of these cultures implies a certain amount of medical skill, such as was displayed in the Harris case, but scarcely more than is imputed to Meyer in his alleged use of tartar emetic. It might seem that in these two means of dealing death, the ptomaine and the germ culture, both evading analysis, a fearful power had been brought within human control, tempting to the multitudes who contemplate gain or release from torment by the ending of some fellow-creature's life. That the power is deadly is not to be denied, but that any extraordinary use is destined to be made of it, experience forbids our inferring. It must be allowed that the crude and inept tests applied by unskilled parties in the whole domain of scientific murder are a standing temptation to its commission. But the slow diffusion of scientific knowledge invades even the most antiquated institutions in time. Before a working knowledge of scientific methods of killing becomes dangerously general, it seems likely that even the least progressive of minds will have been brought to some knowledge of appropriate means of dealing with the crime.

### The New Liquor Law in South Carolina.

The unusual spectacle of a well-concerted and successful attempt on the part of the rural population to exclude from political power the urban population has caused much interest to be centered on the State of South Carolina. This interest was much quickened when the unique liquor law now in force was first promulgated, and this interest has steadily grown in width and intensity since that law became operative on July 1.

This law makes the State itself, through its regularly erected dispensaries, the sole liquor dealer within its own borders. All liquor must be kept in these dispensaries and sold therefrom in official flasks, in which are blown a palmetto tree and the letters S. C. DISPENSARY.



THE OFFICIAL LABEL.

The official label, as shown above, must also be attached to each bottle of whisky sold. Literally interpreted, the law, which is said to be loosely and illogically constructed, would render the

practice of pharmacy in the State impossible. To learn what interpretation would be placed upon the law in so far as it applied to pharmacists, Dr. Eckels, the president of the South Carolina Pharmaceutical Association, together with several other leading druggists of the State, called upon Governor Tillman, the virtual author of the law, and requested him to instruct them as to what course they should pursue.

In reply to this query the governor answered substantially as follows: "There is a great deal of red tape about the Dispensary law," said the governor, "and possibly a good many unnecessary restrictions. I am simply trying to do my duty as executive to see the law enforced fairly and without the slightest desire to involve any one in trouble. There is some ambiguity about Section 17 of the Dispensary Act, but it is very clear that druggists can not sell, as a component part of some prescription put up in good faith, any intoxicating liquors whatever. They cannot manufacture without making a report as to what county dispenser their alcohol or whisky was purchased from and what they did with it. They must under the law take stock once a month and show what they have done with any alcohol or whisky they may have purchased.

"In order to simplify and facilitate the making of these reports and the keeping of these records, the State Board of Control has had prepared a 'druggists' record-book' and blank forms for monthly reports. These will be furnished druggists at cost and they can buy them or not as they see proper.

"Now, there is nothing in the law which requires a druggist to report the quantity of the alcohol now on hand or what he does with it, but let us look at the consequences of neglect to do this. Under the law druggists can not sell any intoxicating liquors, alcohol included. Should evidence be secured that a druggist was selling whisky or other intoxicating beverages, contrary to the act, it is my duty to have him arrested and tried for the offense. It is further my duty to get out an injunction and search warrant. Now if this search, and here is the milk in the cocoanut, discloses the fact that he has in his possession whisky or alcohol 'in quantities going to show that it is for sale,' what follows? Not only is all the whiskey seized and put in the hands of the sheriff but all the personal property in the establishment also, and the druggists' business is broken up until the trial. It has become a 'nuisance' under the act where whisky is sold contrary to law.

"If on the other hand he has reported the amount of alcohol, etc., on hand and shows a disposition to obey the law the charge of selling whisky would only entail a trial for the offense, without the search and injunction. A trial might prove to the satisfaction of the jury that the druggist had been guilty of no infringement of the law, but any man, be he druggist or otherwise, who keeps whisky on his premises 'in quantities going to show that it is for sale,' subjects himself to the danger of being charged with selling it, and the consequent search and injunction. I will not lend myself, or allow the State constables, to make this provision of the act an engine of oppression and vexatious litigation. But I have said it, and mean it, to enforce the law as far as in me lies and hew to the line, let the chips fall where they may."

After this explanation of the law and the governor's position in the premises the druggists withdrew.

### Chattel Mortgages on Stocks of Drugs Including Liquors are Void in Kansas.

It has already been held by this court, says the Supreme Court of Kansas in the case of the First National Bank of Kingman vs. Gerson, that a chattel mortgage upon intoxicating liquors is void, and that, where other property besides intoxicating liquors is included in the mortgage, it is void both as to the liquors and as to the other property. Consequently a chattel mortgage on a stock of drugs, etc., which includes a large quantity of intoxicating liquors, is void in toto. And where a firm of druggists having a large quantity of intoxicating liquors executes to a creditor a chattel mortgage on the entire stock, including such liquors, and such mortgage is void for that reason, the execution of such mortgage, and the delivery of the entire stock of merchandise of the mortgagor to the mortgagee thereunder, is sufficient ground to sustain an attachment by a creditor issued on an affidavit alleging that the defendants, who were the mortgagors, had disposed of their property with intent to hinder, delay and defraud their creditors.

Two reasons for the mortgaging being a disposition of the stock of goods bound to hinder and delay creditors are given.

First, the chattel mortgage being void, the mortgagee under it, after having obtained possession of the goods, could not lawfully sell them, because the chattel mortgage under which possession was given was a nullity.

Secondly, the mortgagee, not being a druggist, and having no permit to sell intoxicating liquor, could not lawfully dispose of the liquors contained in the stock and apply the proceeds to the payment of his claim. Wherefore, the goods, when so mortgaged and delivered to the mortgagee, were disposed of in such manner as necessarily to hinder and delay creditors, if not for the purpose of intentionally defrauding them.

### New York City News.

Geo. E. Huether, of 3594 Third avenue, has been a sufferer from rheumatism for several days.

M. Emil Utard, manager of the U. S. branch of Pinaud's Perfumes, sailed on La Champagne on July 15 for Paris, where he will spend several weeks perfecting a series of novelties being gotten out especially for the American trade.

Jno. W. Ferrier, of J. N. Hegemann & Co., has the sincere sympathy of the trade in the loss of one of his two children under most distressing circumstances. Mr. Ferrier and his family were about to go down the Buttery Whirlpool Elevator at Niagara Falls when his youngest child, a boy of four and a half years old, ran ahead of the party and plunged down the elevator shaft, a distance of 210 feet.

Frederick Weursten, a druggist at No. 61 Bowery, was complainant recently in the Tombs police court against Michael Byrne, a coachman. He said that Byrne had a prescription filled and was charged seventy-five cents, which he refused to pay until his prescription was returned to him.

When this was done he took both the medicine and the prescription and left the store without paying the price. The druggist had Byrne arrested by Policeman Nevin, of the Elizabeth street station. Byrne settled the case by paying the bill in court.

Dr. Perry has enlarged his pharmacy in the World Building by taking over the adjoining store formerly occupied as a shoe store. The woodwork decorations of the annex are uniform with the main store, being in Mexican mahogany, relieved with Tennessee marble and onyx. Dr. Perry's establishments are becoming more and more the resort of journalists and one can seldom enter either of his two handsome stores without encountering at least one of Mr. Dana's "young men" of the *Sun*. Both Dr. Perry and his courteous and genial manager Mr. Gravin can boast of a larger acquaintance among newspaper men than probably any other two individuals in New York City.

### Massachusetts Mention.

The widow of the late Dr. A. Q. Phelan who conducted a drug store in Lowell, Mass., is now carrying on the business with well deserved success.

The wedding of Arlington Chapan Stearns, of the drug firm of Larrabee & Stearns, Melrose, and Miss Julia Cornelia McIntyre, daughter of Mr. and Mrs. James McIntyre, also of Melrose, took place at the residence of the bride's parents, No. 560 Lebanon street, Boston, on the 21st inst.

Frederick Ayer has resigned the treasurership of the J. C. Ayer Co., and Mr. A. S. Covel has been chosen in his stead. This step has been contemplated by Mr. Ayer for some time. He retains his property interests and will still be about the place at convenient seasons, but retires from active official work. Mr. Covel has been giving attention to some of the practical duties of treasurer for some weeks past.

### Pennsylvania Pharmacists.

The drug store of F. W. Brayton, Kane, has been purchased by Gillis Bros., and will be conducted by them in the future.

A can of benzine exploded in the cellar of the drug store of John Ogden & Co., Thirteenth and Walnut streets, Philadelphia, on June 22 setting the place on fire and causing a damage of \$200.

Dr. Charles Bowers visited Columbia recently to superintend the fitting up of his drug store. On Tuesday, June 27, he was married to Miss Cox, of Ephrata, where he will spend his honeymoon.

The offer of the Pope Manufacturing Co., Boston, to give five Columbia bicycles as prizes to the five persons sending the largest list of errors to be found in educational text books is one which will probably be widely taken advantage of both by teachers and their students. Particulars regarding the offer may be obtained from the firm's educational pamphlet.

### Southern Siftings.

O. O. Gates, of Powhatan, has accepted a position at Schick's drug store, Renwood, West Va.

Mr. Cox, of Richmond, has bought out Mr. T. R. Southerland's drug store, at Newport News, Va., which he will in the future run at the same stand.

W. H. Logan's drug store, at Laddonia, Mo., was struck by a cyclone recently and blown to pieces.

Dr. Henry R. Spruance has purchased the drug store at Fifth and Poplar streets, Wilmington, Del.

Willie Houghton has opened a drug store in Scottsville, Va., of which Fred Tonkin is the manager.

At a meeting held at the store of J. T. Shuptrine on June 21, a committee was appointed to formulate a plan for effecting a permanent local organization in Savannah, Ga.

E. R. Beckwith, a prominent member of the Virginia Pharmaceutical Association, mourns the loss of his 13 year old son, Hugh, who was drowned in a pond while trying to recover his hat.

Dr. Tom D. Sale, of the Sale-Davis drug firm, of Dawson, Ga., purchased the large establishment of the Hillman & Agar Company, at Albany. They will continue their business in Dawson, Ga., and will make that city their headquarters.

The Piedmont Drug Mill Company, consisting of S. W. Nowlin, president, S. P. Halsey, vice-president, and J. A. Mahood, secretary and treasurer, have purchased the plant formerly operated by the Lynchburg Drug Mills and are now doing a general milling business in the line of drugs and spices.

Mr. Andrews has purchased the Bay Pharmacy at Tampa, Fla., and will place it in first-class shape. Edward Berger, of Nassau, N. P., has been engaged to take charge of the drug store, and will have a working interest. He is a brother of Ernest Berger of Dr. Morton's drug store, and is an experienced druggist.

R. D. Grigg, who has for the past two years been manager of the Masonic Temple Pharmacy, Savannah, Ga., has associated himself with Mr. Huff and is located at 139 Broughton street, under the name of the Chatham Pharmacy. They have a complete new stock of drugs and toilet articles. They will make a specialty of soda water during the Summer.

The Alexander Drug and Seed Company, of Augusta, Ga., which was burned out about a year ago, has now moved into its permanent new quarters in the new King Building. The store is now 278 feet and is fitted up in carved cherry and bevelled glass. The manager, S. C. Dunbar, is the moving spirit of the enterprise as the head of the firm, J. H. Alexander, is kept busy by his official duties as Mayor.

Will Hawks, a clerk in the wholesale drug house of Chapman, White, Lyons & Co., Knoxville, Tenn., went into the basement, a few days ago, to draw some copal varnish. He had a lantern with him, and while at work the varnish caught fire. Hawks started to the door with the can, which was all ablaze, and by the time he reached the outside he was severely burned about the hands and face.

A premature "4th of July" explosion occurred on the 1st in the establishment of H. W. Williams & Co., wholesale druggists, Fort Worth, Tex. The previous night some one left the gas burning in the vault, and being very close the light soon ceased to burn, but the gas continued to escape. It so happened that R. N. McKnight was the first one to need a light in the vault next

morning and on striking a match the explosion occurred, causing quite a concussion and burning him very severely about the face and hands. The vault had been opened thirty minutes or longer and had it not been for this fact the result would have been far more serious.

### Random Notes.

Wm. Spencer, of West Duluth, has moved his store into the Silvey Block.

Dunbar's new pharmacy at Valley and Cypress streets, Manchester, N. H., has just been opened and is a most attractive store.

The Weiss-Chapman Drug Co. has been incorporated at Denver, Col., with a capital stock of \$25,000. Louis and Fred Weiss and N. H. Chapman are the incorporators.

The Doctors' Business and Protective Association of St. Joseph, Mo., is somewhat exercised over what is termed the growing tendency toward counter prescribing by the pharmacist.

The firm of Charles Clifford & Co., proprietors of the Hall Drug Store on Center street, Rutland, Vt., has dissolved partnership. Dennis Mears, one of the partners, has bought the business and will continue it.

The nickel is legal tender to the amount of 25 cents. Silver coin—standard dollar, unlimited; trade dollar, not legal tender; halves and quarters to \$10; 20-cent pieces to \$5; 10-cent pieces to \$10; five and three cent pieces to \$5.

A suite of handsome offices is being fitted up at the corner of Wabash avenue and Randolph street, for Chocolate-Menier. This is regarded as one of the best corners in that city. The offices will occupy the second floor immediately over Deane Bros. & Lincoln.

The Economical Drug Co. of Chicago has confessed judgments amounting to \$39,637, and is now in the hands of the sheriff. The company was incorporated with a capital of \$50,000. Its object has been to cut prices on drugs, with the idea that by selling larger quantities than other retailers, money could be made on a smaller margin of profit. Failure to renew paper at the banks is given as the direct cause of the trouble.

### Foreign Notes.

Edward Evans, of the noted firm of Evans, Lescher & Webb, of London, Evans, Sons & Co., Liverpool, Montreal and Toronto, has reached Chicago on his trip around the globe from Montreal, Victoria and San Francisco.

M. Ernest Hecht, Doctor of Law, has been charged by the Ministry of the Colonies of France with a mission to the Chicago World's Fair. The object will be to study the natural products, including drugs, etc., of the tropical colonies of other countries, with a view to comparing them with those produced in the colonies of France.

At the Eleventh Correctional Chamber, Paris, Mr. Bouvier, pharmacy student, was recently sentenced to ten days' imprisonment for having insulted a policeman in the Boulevard St. Michel during the serious rioting of the previous night. The benefit of the Béranger (first offenders) Act was refused to him, as well as to the medical and other students condemned at the same time.

## With the Advertisers.

### Raymond's Plasters.

Raymond & Co., 62 Carroll street, Brooklyn, N. Y., will send to druggists mentioning this paper one-half dozen of their Pectoral Plasters if the druggists will in return send them the names of 100 heads of families in the town in which they do business. The offer applies to retail druggists only.

### Palatable Pepsin.

The Cudahy Packing Co., South Omaha, Neb. manufacture a delicious confection in the shape of a pepsin tablet flavored with wild cherry. Each tablet is claimed to digest 250 grains of solid food. Their digestive activity can be proven by the usual methods of testing pepsin, yet in appearance, taste and flavor they are simply an agreeable confection without any odor or taste of pepsin. This is certainly an original and novel method of preparing pepsin, and offers it in a form that will be most pleasant to children and invalids who may object to taking pepsin in the usual commercial forms.

### Skookum Root Hair Grower.

This oddly named compound which has been introduced into the proprietary medicine world by the Skookum Root Hair Grower Co. is claimed to be the most efficient of the few really beneficial preparations now on the market. The word "Skookum" is derived from the "Chinook Jargon" and signifies strong or powerful, the plant from which this tonic is stated to be made being so named by the Indians of British Columbia, to which section of the country it is indigenous. Its peculiar and remarkable stimulating properties when applied to the roots of the hair, is said to have given rise to its odd title.

### Eagle Brand Condensed Milk

To Gail Borden belongs the credit of being the pioneer in the condensed milk industry. He it was who originated the process of condensing milk and his product is to this day regarded as the most reliable and pure of the many brands which have since appeared in the market. Condensed milk finds greatest employment for culinary purposes and as an alimentary in the rearing of delicate infants, its purity rendering it of special value for the last named purpose. Physicians have no hesitation in prescribing the "Eagle Brand" and it is mainly due to the recommendations of prominent members of the profession that it is used to the extent it is, as a nourishing substitute for mothers' milk.

Druggists who require a cream product in the preparation of "cream syrups" use the "Eagle Brand" in preference to others, as they find it keeps longer and furnishes a better article.

### Fox, Fultz & Webster's Ice Cream Cabinet.

The cabinet illustrated below is used largely by druggists as a neat and convenient adjunct to the soda fountain and is in fact regarded in many quarters as indispensable to the proper serving of ice cream soda. It is claimed that by its use the serving of ice cream with soda water is accomplished as conveniently and as neatly as is the serving of syrups.

The cabinets are arranged with a galvanized iron lining, in which is soldered a shute with opening at the end. In this lining and around the shute the ice and salt are placed, and in the shute is placed the tin drawer for the ice cream. The point is made that by this arrangement all contact of ice, salt or brine with



No. 1 Soda Fountain Cabinet.  
Patented.

the cream is absolutely avoided, and the cream is kept in perfect condition, the ice and salt being replenished once a day, or twice, if necessary, in the hottest weather.

The cabinets are made in two regular sizes: No. 1. Capacity about six quarts, selected ash or oak, finely paneled and finished with nickeled trimmings and faucet, ornamental corner posts and nickeled rods on cover. Price, \$15. No. 2. Capacity about five quarts, whitewood, without panels, stained cherry red, nicely finished, nickeled trimmings and faucet. Price, \$12. The outside dimensions of these cabinets are about 15 x 15 x 21 inches, not including faucet or top rail.

### Antikamnia in Capsules.

At the recent meeting of the Indiana Pharmaceutical Association the question was asked: "In making capsules of antikamnia what is the usual process?" and in the discussion which followed it was agreed upon that all powdered drugs wanted in capsules are best put up in the dry powder as the effect is more speedy and appreciable. Upon the exact point of the query our experience agrees fully with that taken by the majority of the association, that quinine, cinchonidia, as well as antikamnia, and indeed all powdered drugs wanted in capsules, are best put up in the dry powder

as the effect is more speedy and appreciable.

In commenting upon the above it is pleasant to note that it was deemed appropriate, even though the point was not involved in the query, to lay great stress upon the preservation of the integrity of the drug employed. In every instance the article called for by the prescription should be used, and no substitute allowed. Druggists cannot use something in place of antikamnia that will "answer as well," and they should not if they could.

### Diabetin.

A very exhaustive report on the great value of Diabetin was incorporated in a paper on *Diabetes mellitus*, read by Privy Councillor Professor Dr. Leyden of Berlin University, at the XV. Congress of the Berlin Baineological Society, held March 10, 1893.

The paper is published in full in the *Deutsche Medicinal Zeitung*, June 5 and 8, 1893, Nos. 45 and 46, and we give its salient points below.

Prof. Leyden referred to the various experiments which had been made twenty years ago at his clinic (then in Strassburg) with inulin and levulose by one of his students, Dr. Komarow. It was shown at that time already that the excretion of sugar was diminished when diabetic patients were given these particular forms of sugar. At that time levulose was very high-priced. Since then the price has been considerably reduced by the Schering process, and therefore Prof. Leyden in 1891 and 1893 again took up these experiments.

Dr. G. Klemperer, his assistant, was able to prove, in the case of two diabetic patients, that the exhibition of from 25.0 to 60.0 gms. (1 to 2 oz.) of levulose daily for a short period of time, does not increase the sugar of patients suffering from the grave form of diabetes.

The next experiments were made at the female division of the clinic by Dr. Heyse, Staff-Surgeon to the German Army.

The daily amount of carbohydrates partaken by the first patient was 170.0-180.0 gms. (about 6 oz.) during some periods 50.0 gms. (1 3/4 oz.) of levulose was substituted for the same quantity of cane-sugar.

The proportion of sugar in the urine to the quantity of carbohydrates taken was found to be:

For levulose (average of 24 experimental days) = 3.9:100.

For cane-sugar (average of 14 experimental days) = 6.6:100.

The difference in favor of levulose therefore amounted to 2.7 per cent.

For the second patient the same relation was found to be:

For levulose (average of 11 experimental days) = 27.5:100.

For cane-sugar (average of 12 experimental days) = 31.9:100.

The difference in favor of levulose amounted to 4.4 per cent. The sugar was estimated in the urine by polarization, titration with Fehling's solution and with Einhorn's fermentation tube, all the methods giving corresponding results.

A most remarkable fact, observed in connection with this case is the following:

During the exhibition of levulose, the amount of sugar in the urine decreased from day to day during the experimental period, so that the oxidation of the carbon hydrates increased constantly, showing an adaptation of the system, while just the reverse was true for cane-sugar, the daily amount of sugar in the urine increased during that experimental period.

The result of these therapeutical trials (which are illustrated by diagrammatic curves) is a very valuable one. It is shown thereby that levulose is put to much better use by diabetic patients and less of it is excreted by the urine than of cane-sugar which

also includes the sugar formed in the system from the carbo-hydrates of the food. Although none of the above cases were of a very grave character, two at least must be considered as quite serious ones.

A portion of the levulose was excreted as dextrose without having been put to any use, but this was much less than with ordinary sugar. An amount more or less considerable, was certainly consumed and put to use in the organism.

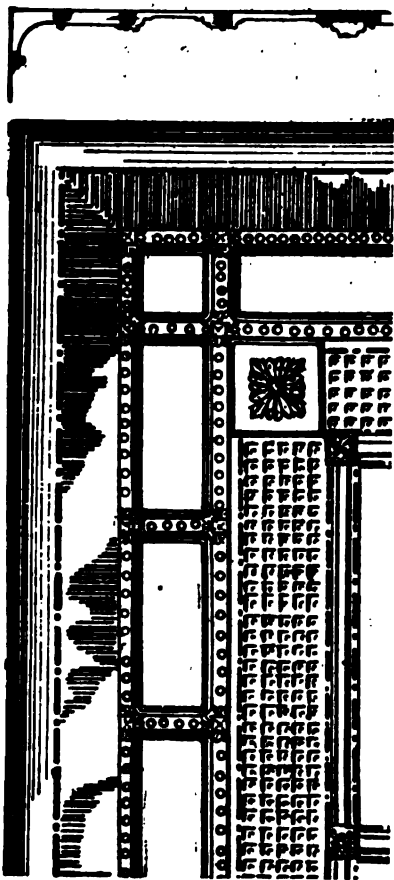
These results certainly should encourage us to make use of levulose in the treatment of diabetic patients, for the reason that, if a moderate amount of this form of sugar is partaken of, say 50.0 gms., or a little more (nearly 5 oz.) per day, a much larger portion of it is consumed by the system, while only an inconsiderable portion is again excreted with the urine.

The name of diabetin to this levulose was given by E. Schering because its main therapeutic use is that of a substitute for cane-sugar in the regimen of patients suffering from diabetes.

Diabetin is supplied in one pound screw top glass jars, by Schering & Glatz, 55 Maiden Lane, New York, who are sole agents for the United States and Canada.

### Kinnear's Patent Ceiling.

In the onward march of improvements in the mechanical arts during the past decade, no one line shows greater progress than the methods and materials used in the construction of buildings. The architect, the engineer, and the mechanic have joined forces with the result that the modern building of today possesses not only beauty of outline, but all the elements of strength and durability besides. Iron and steel have largely taken the place of wood, plaster, and brick, not only in the direct construction of the building itself, but in the interior finish



and decoration as well. Steel is being very largely used for ceilings, wainscoting, etc. We show here a section of ceiling made from plates of cold rolled steel which is now being largely introduced by metropolitan druggists, the old established firm of J. Milbau's Son, Broadway, New York, being

among the latest to erect a ceiling of the kind illustrated.

It is claimed for the steel ceiling of the Kinnear & Gager Co. that it possesses all the requirements of a perfect ceiling and is susceptible to any style or degree of ornamentation. It is not injured by water and will last as long as the building itself.

### U. S. Pharmacopœia 1890.

In response to inquiries received from a number of readers regarding the probable date of publication of the new Pharmacopœia, we would state that the revised volume will in all likelihood be received from the printers in time for distribution at the Chicago meeting of the American Pharmaceutical Association.

Although it forms a more bulky volume and has cost more to publish, the committee of revision has arranged to furnish it at a lower price than that charged for the edition of 1880.

The new edition will be sent out in different styles of binding and printing, and the price at which we will be glad to receive orders and transmit the book postage paid to readers of the DRUGGIST AND RECORD depends upon the style of the volume selected.

The different styles are noted below:

|   |        |
|---|--------|
| Muslin bound.....   | \$2 50 |
| Sheep.....  | 3 00   |
| Interleaved.....  | 4 00   |
| Printed on one side only, the left-hand pages containing text and the right-hand pages being blank..... | 3 00   |

Payment must accompany the orders, which will be filled in rotation as received. Orders should be addressed and checks made payable to the American Druggist Publishing Co., at 37 College place, New York City.—From *American Druggist and Pharmaceutical Record*, July 6, 1893.

### Truth in Jest.

It is an old saying that "there is many a truth spoken in jest," and the following humorous circular, which made its appearance in Wall street a few days ago, illustrates the position of the extreme advocates of silver perhaps more forcibly and plainly than the most serious paper on the financial situation could have done.

—*American Grocer.*

BLOOMINGDALE, JULY 15, 1893.

### A New Currency Movement.

Producers of Copper in Line.  
Demand for Recognition.  
Copper Must be Maintained on a Parity with Gold and Silver.

To the People of the United States:

The producers of copper appeal to you for a just recognition of the metal which they represent, and ask your aid in having a bill passed at the coming session of Congress which will re-establish copper as a currency metal, maintaining it on a parity with gold and silver, and providing for the free coinage of this metal at a ratio of four hundred and fifty to one.

Copper is the true metal of the people and has been used for money for over two thousand years. When our country was in distress and its credit assailed, when the grasping money sharks hoarded their gold and silver, copper remained true to its duty and continued in active circulation and was the only available means of exchange which the poor laboring man could use for his daily purchases of the necessities of life.

The gold bugs of the East and the silver bugs of the West have lowered the price of copper and prevented its proper use as a national currency. The time has arrived for the producers of copper and the small army of miners who are dependent upon this metal for their living to raise the cry of free copper or free fight, and to pledge themselves to wage in blood up to their donkeys' ears in asserting their rights. The supply of copper is so great that it, better than any other metal, can meet the demand for an increase of the currency. If, with a free copper law passed and

a fair trial of it had, copper does not become as valuable as gold and silver, and should its adoption ruin all the business interests of the country, we will stand aside and give others a chance to experiment with any pet financial theory they may have.

If foreigners decline to accept copper in payment of claims against this country, we suggest the formation of an army to be recruited from the States of Colorado, Montana and the Dakotas, and to be led by Governor Waite, of Colorado. This army to be used for the purpose of forcing foreign nations to accept whatever currency the United States may see fit to issue.

Resolved—That it is not to the interest of the copper producers of the United States to unite with the farmers who seek to have the government establish storehouses for grain and to issue government notes against deposits of grain, at the rate of one dollar per bushel.

Resolved—That a copy of the action of this meeting be sent to all the commercial bodies of the United States, with a request that they urge their representatives in Congress to assist in the passage of a bill for the free coinage of copper.

L. U. NATIC, Secretary.

### The Cynical Clerk and the Suicide.

A disheveled man, with a green, ghastly glare in his hollow, spectral eyes, dashed into the corner drug store late last night, apparently laboring under intense excitement. His bloodless fingers were tightly clenched into his thin palms, and on his forehead the great drops stood out chilly and damp, says the Cincinnati *Commercial Gazette*.

Staggering up to the prescription desk he hissed, in a sepulchral voice

"Gimme some arsenic, quick!"

The clerk slowly laid down his pestle and faced about.

"What do you want with arsenic?" said he coldly.

"I want to kill myself!" gurgled the frenzied one, hanging desperately over the railing, with limp legs dragging on the floor. "Life hain't no charms for me, and I want to die! Gimme some arsenic, quick!"

"All right, mister," cheerfully responded the clerk. "You shall have your arsenic," and he turned to the shelf.

The stranger's knees caved in against the counter with a thump.

The druggist turned, nonchalantly, with a package in his hand, and without the slightest feeling in his careless voice, went on:

"Any man that's big enough fool to want to die hasn't any business living, and the sooner you shuffle off the better it will be. Now, take this stuff and take it quick, so we can get your carcass out of the shop in time to shut up for the night. And for goodness sake don't muss up the floor," said he, slapping the packet down on the counter and turning back unconcernedly to his work.

The fellow feebly shrunk away from the little paper packet, and his great eyes bulged with horror.

"Wh-wh-wh-what!" he stammered hoarsely. "You wouldn't give a feller being arsenic to kill himself with?"

"I wouldn't?" ejaculated the druggist. "I'd like to know why not? That's what I gave that to you for, ain't it? Hurry up and take it and go off and die!"

With a disgusted, indignant expression blazing on his face, the wild-eyed customer remarked:

"Well, I'll be blanketty-blanked! Give a man poison to kill himself with—what's the world coming to—well I'll be blanketty-blank! You hain't got no more feeling than a tin tobacco tag."

And with a look of reproach that soured the pulv. sacch. the suicidal citizen stalked haughtily out, leaving the poison unconsumed.

## Review of the Wholesale Market.

NEW YORK, July 19, 1893.

*It should be understood that the prices quoted in this report are strictly those current in the whole-sale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

The demand for drugs, dyestuffs, and chemicals during the past week has been of better proportions than during the previous interval. Jobbing houses reporting an increase of orders from interior points. The market, however, is without that animation usually characteristic of it at this period of the year, buyers still pursuing a cautious policy with regard to quantity lots, and manifesting no disposition to purchase in advance of immediate requirements. Prices on most lines are steady, and holders do not appear to be at all desirous of increasing the distribution by modifying quoted values.

### DRUGS.

ALCOHOL is maintained at \$2.18 @ \$2.22 less the usual rebate, and the jobbing demand is of average proportions.

ARNICA FLOWERS are quiet but firm at 11 @ 12c.

BARKS.—Buckthorn is dull at unchanged values. Casarea is without improvement at 6 @ 7c. though these figures can be shaded for quantities. Sassafras is inquired for at 8 @ 8½c. Soap is quiet at nominally unchanged values.

BALSAMS.—Copaiba, Fir and Peru have continued quiet during the interval, but without quotable change. Tolu is dull and may be obtained down to 30c. Importers quote 22c.

CACAO BUTTER in bulk remains very quiet, but holders refuse to shade 34 @ 35c. as to quantity.

CANTHARIDES has shown no action of any consequence during the week. Russian offer at 70 @ 75c. and Chinese at 28 @ 30c.

CASSIA BUDS are maintained firmly at 18c. without however any large sales being reported.

CASTOR FIBRE is very scarce and now held at \$20 @ \$22.

CHAMOMILE FLOWERS remain quiet, but the market is steady in tone with best German quoted 25c. and Roman at 20c. Forward shipments on the latter are quoted 17½ @ 18c. laid down.

CUBE BERRIES continue dull and the tone of the market is easy though for XX 30c. is the open price, and for ordinary 25c. is nominally quoted.

CUTTLE BONE, Trieste, can be obtained at 12 @ 12½c., the values continuing irregular owing to the competition of Bari goods. Other grades are quoted down to 11c.

DAMIANA LEAVES offer more freely and down to 27c. is now quoted for jobbing parcels.

ERGOT, German, is maintained firmly at 40 @ 42c. notwithstanding a quiet market, Spanish held at 45 @ 50c.

GUARANA has sold at \$1.05, but this is regarded as an inside figure for quantities.

HENBANK LEAVES have been in better demand and we are reported sales of 2,000 lbs. at 7½c.

JABORANDI LEAVES are scarce and 40c. is given as an inside value.

LUPULIN of the better grade is scarce and maintained in firm position at \$1.75 @ \$2.25, with prospects of an early advance unless existing customs regulations are altered. The appraiser refuses to allow

entry to goods not up to the standard of the old ash test and the stock is in consequence kept low.

LYCOPodium is quiet but firm at 53 @ 55c. as to quality.

MENTHOL is scarce, and \$3 75 is generally asked for the small quantity available.

MORPHINE is in good consumptive demand at manufacturers' prices.

OPIUM appears to be easier, though prices are not quotably lower. Single cases continue held at \$2.40 and broken lots \$2.45 and upwards as to quantity. Powdered continues held and selling at \$3.35 @ \$3.40.

PILOCARPINE is firmer in sympathy with the leaves. The prevailing scarcity has caused an active demand with sales at \$19.00 per oz.

QUININE has been in good demand during the past week, owing to a freer disposition on the part of some holders to part with stock upon a cash basis. Sales are said to have been made of fully 35,000 ozs. foreign at 17 @ 17½c. In a jobbing way there is a considerable quantity of stock passing out at 18 @ 18½c. as to make and quantity, but a lack of speculative interest is still a feature of the market.

SAFFRON, American, is jobbing fairly within the range of 35 @ 40c.

SOAP, Conti's white, is held and selling at 10c.; though ex-wharf goods can be purchased for 9½c.

WAX, Brazil, is inquired for and sales have been effected at 9½c. for No. 3 and 17½c. for No. 1.

VANILLA BEANS are offered sparingly and quoted prices are maintained with firmness. Whole held at \$6.50 @ \$11.00 and cut \$4.75 @ \$5.25. The statistical position is regarded as very favorable.

### DYESTUFFS.

CUTCH continues dull at nominally unchanged prices. Jobbing sales of S M are making at the range of 4½ @ 5c.

DIVI DIVI continues inactive at \$45.00 @ \$55.00.

GAMBIER is neglected momentarily. Steamer goods in store can be purchased at 4.10 @ 4.15c. In a large way 4c. cash appears to be an acceptable figure.

LOGWOOD CHIPS are scarce and the market for extract is strong in consequence. The latter is quoted firm upon the basis of 8½c. for bulk.

MADDER, Dutch, continues inactive. The price remains 10 @ 15c. as of quantity.

NUTGALLS are without new or interesting features.

SUMAC, Sicily, continues dull but steady at \$72.50 @ \$77.50, and Virginia at \$43.00 @ \$47.50.

### CHEMICALS.

ALUM continues in fair request and steady at \$1.75 for lump and \$1.85 for ground.

AMMONIA CARBONATE, English, continues held and selling at 8½c. Domestic finds sale at 8c., while German can be purchased at 7½c.

ARSENIC, white, is in small supply, and held at the previous range of 3½ @ 3¾c. as to brand and quantity.

BLEACHING POWDER (calc chlorinata) remains quiet but steady, German being held at 2½c. in casks and English 2¼ @ 2½c.

BLUE VITRIOL is well sustained and passing out freely to consumers at the range of 3½ @ 3¾c.

BORAX is quiet at nominally unchanged quotations.

BRIMSTONE, crude, seconds, are held at \$19.50 @ \$20; to arrive is quoted \$19 and forward shipments \$18.75 @ \$19.

CARBOLIC ACID develops no action of any importance; the demand is barely up to the average of this season. Bulk is quoted 14½c. and pound bottles 20½c.

CHLORATE POTASH does not improve in demand and the tone of the market is yet regarded as easy. Crystals quoted 15 @ 15½c. and powdered 15½ @ 15¾c.

CITRIC ACID has advanced in this market and barrels are now quoted 45½c. and cases 46c.

CREAM TARTAR, crystals, are not offering below manufacturers' prices, being held at 19½c. For powdered 20c. is asked.

NITRATE OF SILVER has declined twice since our last report, the quotation now standing 48 @ 49½c. for lots of 1,000 ozs.

NITRATE OF SODA is maintained with some degree of firmness at \$1.70 for quantities, with the range at \$1.70 @ \$1.80.

OXALIC ACID is quiet but firm at 6¼ @ 6½c.

QUICKSILVER is in active demand at 54 @ 55c.

SAL SODA is in fair request and the market is firm at \$1.05 for domestic and \$1.05 @ \$1.10 for English. The latter for forward delivery can be purchased at 95 @ 97½c.

### ESSENTIAL OILS.

ANISE continues in limited demand, though offering with increased freedom and quoted in instances down to \$1.35.

BERGAMOT is passing out to the trade in small lots at \$2 @ \$3.

CAJUPUT is maintained at 45 @ 55c.

CASSIA is reported as in moderate demand only, but the market is held firmly at 80 @ 85c. Primary sources are cabled stronger.

CITRONELLA is passing out freely to manufacturers at quotations.

CLOVE continues held at 55 @ 60c., but the demand is limited to small and unimportant quantities.

CUBE B is dull and neglected at the moment, though free offers to sell are made at \$2.50 @ \$2.60.

PENNYROYAL, French, is offering lower, some importers quoting \$1.45 as acceptable, Domestic is maintained at full, \$1.75.

PEPPERMINT, HGH has been inquired for for export, but the limits submitted have been too low for holders' acceptance. \$2.75 is the general asking price, but sales of 25 cases for export are reported at a trifle below \$2 70. Bulk remains quiet but firm at \$2.45 @ \$2.65 as to quality.

SASSAFRAS and WINTERGREEN are quiet, though without quotable change in values.

### GUMS.

ACACIA, sorts, are easier at the range of 13 @ 13½c. as to quantity. Fourth and fifth picked are at rifle lower, with 20 @ 21c. and 15 @ 16c. quoted respectively. Senegal is quiet and unchanged.

ASAFETIDA is inquired for at previous prices.

ALOES are maintained steady at former prices, but there is a lack of speculative interest, and no new features have developed.

CAMPOR, refined, is yet obtainable from second hands at 38c. for bbis, and 49½c. for cases, a cut of one and a-half to two cents from manufacturers' prices.

CHICLE continues a little irregular, though the lowest price openly quoted is  $37\frac{1}{2}$  @ 38c.

GEDDA is in moderate demand with the current sales at 23 @ 24c.

GUALAC does not change from 20 @ 25c.

KINO in a small way is selling at 75c.

SHELLAC is dull and in limited demand, due, it is thought, to a more limited consumption in the industries. Prices are, however, maintained at about previous figures.

TRAGACANTH, Aleppo, is inquired for, but there appears to be no disposition on the part of consumers to increase purchase beyond immediate necessities.

#### ROOTS.

ACONITE, ALKANET and ALTHA remain quiet at nominally unchanged prices.

GALANGAL has been inquired for and we hear of sales of 500 lbs. at  $4\frac{1}{2}$  @ 5c.

GINSENG continues dull, and prices are unsettled. Supplies here can be purchased at \$1.75 @ \$2.75, but these figures do not appear to stimulate important demand from China.

GOLDEN SEAL is coming very slowly to hand. New crop is held at 20c. laid down. Spot supplies of old are quoted 21c.

IPERCAC is in moderate consumptive demand at \$1.30 @ \$1.35.

JALAP is dull and neglected at unchanged values.

ORRIS, Verona, has sold at  $18\frac{1}{2}$  c., 1,700 lbs. being reported sold at the figure quoted.

SARSAPARILLA, Mexican, is scarce and held firmly at 8 @  $8\frac{1}{2}$  c.

SENEGA, new crop, is offering from the Northwest, with bids invited from buyers. Old is quoted 50 @  $52\frac{1}{2}$  c. and we are reported sales of 2,000 lbs. at the inside figure.

SNAKE and VALERIAN are without important change, either as regards price or demand.

#### SEEDS.

ANISE is dull but unchanged at 9 @ 11c.

CANARY is in better demand and the tone

of the market is stronger. We hear of sales of 200 bags at  $2\frac{1}{2}$  c.

CELERY has weakened a trifle with business during the interval at 11 @  $11\frac{1}{2}$  c.

CORIANDER is in moderate demand and steady at  $3\frac{1}{2}$  c. for bleached and 3c. for unbleached.

COLCHICUM finds sale at 12 @ 14c., but the demand is only moderate.

HEMP, Russian, is passing out in fair quantities to consumers at  $2\frac{1}{2}$  c.

POPPY continues to offer at  $8\frac{1}{2}$  c. @  $8\frac{3}{4}$  c., but only jobbing sales are reported at this range.

RAPE, German, finds moderate consumption at  $3\frac{1}{2}$  c.

#### True Insect Powder.

There are few people who have any idea to what extent the flowers of *chrysanthemum cinerarsifolium* are cultivated in Dalmatia, for the sole purpose of making the powder which has such a reputation as an insect destroyer.

The whole of the supply of these flowers has hitherto been derived from the Austrian province of Dalmatia, and the neighboring State, Montenegro. Trieste is the market to which these flowers are brought, and from whence they are distributed to the average annual value of \$200,000 to \$250,000.

The plant is one that is easily cultivated in any kind of soil, and almost in any climate. Within quite recent years it is said to have been introduced into Australia, California, and South Africa, in each of which its cultivation on an extended scale for commercial purposes is contemplated. In the neighborhood of Berlin it is also stated that the plant is grown largely, but up to the present time, Dalmatia is the chief source from whence Europe and America draw their principal supplies. The harvest commences at the beginning of June, and in face of the report that the plants had suffered much from the severity of the past Winter, the crops are looked forward to with some anxiety.—Adapted from the *Gardener's Chronicle*.

#### Good Roads.

(From Hardware.)

We are going to have good roads in this country, and sooner than most people think. It will not be due to the millionaires or the mossbacks either, but to the young blood of the nation—the boys—who furnish their own motive power and travel over the country on two wheels. Chas. Kingsley's lines might thus be paraphrased and dedicated to the inventor of bicycles:

When all the world is young, lad,  
And all the trees are green;  
And every goose a swan, lad,  
And every lass a queen;  
Then hey for leggings and wheel, lad,  
And round the world away;  
Young blood will have its course, lad,  
And every dog his day.

#### "Chicago Methods."

"I want to use your telephone," said a stylishly dressed woman, with a haughty air, entering a Chicago drug store.

"Certainly, madam," said the clerk, courteously.

The woman called up another drug store three blocks away.

"Is this Pestic & Mortar's?" she said. "It is?" "Well, this is Mrs. So-and-so, of Adams street. You understand? Well, I want you to send around, right away, a bottle of that tooth powder I use. Do you hear me? And two pounds of castile soap. Got that down? And some soothing syrup for baby; yes, soothing syrup. And half a dozen two grain quinine pills—yes, quinine pills, I said. Are you deaf? And—that's all! Send them around immediately—don't forget now!"

And she hung up the receiver and started from the drug store which she had been using as an ordering depot for a rival concern, without so much as "Thank you." At the door she stopped to say in withering tones to the clerk:

"You ought to have that telephone fixed. It works miserably!"

## Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted free of charge. Write distinctly, on one side of paper only, and do not use postal cards.*

#### POSITIONS VACANT.

WANTED at once reliable druggist, of good habits, for a pleasant permanent position. G. W. V. Moy, Plainfield, N. J.

WANTED—A bright junior for a pleasant first-class Brooklyn pharmacy. Address "Rhet," care of AMERICAN DRUGGIST, 37 College place, New York.

WANTED—A druggist, a doctor, a specialist and a real estate man, to join in a good enterprise near Chicago. H. P. Eysenbach, Porter, Ind.

CLERK speaking German can hear of a vacancy by applying to "Rumes," care of AMERICAN DRUGGIST, 37 College place, New York City.

#### POSITIONS WANTED.

SITUATION WANTED—By a pharmacist, licentiate of New York State Board of Pharmacy. Honest and temperate. Address "Powder," care J. G. Wigg, Stamford, Conn.

AS TRAVELING SALESMAN—Druggist having 15 years' retail experience and large acquaintance in the trade wishes position on the road with some reputable house. Address "Quinine," care of AMERICAN DRUGGIST, 37 College place, New York.

A DRUG CLERK of five years' experience desires to make a change. Can furnish best of reference from past and present employers. Address "Lenmas," 351 Totowa avenue, Paterson, N. J.

WANTED—Position as drug clerk in N. Y. City or Brooklyn, after Aug. 15, by graduate N. Y. C. P. Address, "Aristo," care AMERICAN DRUGGIST, 37 College place, New York.

WANTED—Position in laboratory by a young man 20 years of age who has had four years' experience. Can give best of reference. Address "Central," care AMERICAN DRUGGIST, 37 College place, New York.

SITUATION WANTED as manager or head clerk by a druggist of over twenty years' experience; good references concerning ability and proper qualifications. Address "Competent," care of Messrs. T. Sison & Co., Hartford, Conn.

SALESMAN—A druggist well acquainted throughout Pennsylvania, with experience on the road, desires a position to represent wholesale or druggists specialty house on either salary or commission; best references. Address "Rhet," care of AMERICAN DRUGGIST, 37 College place, New York.

WANTED—A "Ph.G." desires a situation in a retail drug store. Address Box 675, Ada, Ohio.

WANTED, in the State of California, a position in good drug store; will work for small salary; three years' experience, strictly sober, good habits, best of reference. Address Fred S. Hoback, Big Stone Gap, Va.

#### BUSINESS OPPORTUNITIES.

FOR SALE—A drug store in East Palestine, O. can be bought right by an immediate buyer. For full particulars address Dr. E. Greenmeyer, East Palestine, O.

DRUG STORE for sale, stock and fixtures, in the growing town of Great Falls, Me.; best of reasons given for selling; will be sold at a discount if taken at once. Address J. W. Roberts, Great Falls, Me.

FOR SALE—Drug store in country town of about 2,000 inhabitants, pleasant and healthful locality, 5 miles from the city of Hornellsville; only drug store in town, and doing a satisfactory business; new building, finely finished, for sale, or will rent; stock about \$1,000; new, and in first-class condition. For details call on or address John B. Dixon, Allegany, care Almond, N. Y.

Clerks and Employers should call at this office, register their wants and examine our list of POSITIONS WANTED, POSITIONS VACANT and BUSINESS OPPORTUNITIES, which can be consulted free of charge.

# ORIGINAL PACKAGE PRICES.

It should be understood that the prices quoted in this column are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a considerable range of prices.

## Drugs, Chemicals, &c.

|                            |       |   |       |
|----------------------------|-------|---|-------|
| Acetanilid, bulk, per lb.  | .39   | @ | .41%  |
| " ibs., per lb.            | ...   | @ | .38   |
| " ozs., per oz.            | ...   | @ | .06%  |
| Acetate of lime:           |       |   |       |
| Brown, per 100 lb.         | .90   | @ | .95   |
| Gray, per lb.              | .013% | @ | .013% |
| Acids:                     |       |   |       |
| Acetic Com'l.              | .08%  | @ | .08   |
| Aquaforia, 36 deg.         | .03%  | @ | .03%  |
| " 40                       | .02%  | @ | .04%  |
| Benzole, German.           | .50   | @ | .55   |
| " English.                 | .49   | @ | .09%  |
| Boric, Whole.              | .13%  | @ | .14   |
| " Powdered.                | .13%  | @ | .14   |
| Citric, American.          | .44%  | @ | .45   |
| " English.                 | ...   | @ | ...   |
| Carbolic Crystals.         | ...   | @ | ...   |
| bulk.                      | .14%  | @ | .17%  |
| lb. bottle.                | .23%  | @ | .23%  |
| Muriatic, 1800s deg.       | .90   | @ | 1.37% |
| Nitric, 36 degrees.        | .03%  | @ | .04%  |
| " 40                       | .04   | @ | .04%  |
| Oxalic, English.           | .06%  | @ | .06%  |
| " German.                  | .06%  | @ | ...   |
| Picric.                    | .26   | @ | .26%  |
| Salicylic.                 | 1.00  | @ | 1.28  |
| Salubric.                  | ...   | @ | 1.25  |
| Tartaric, Crystals.        | .23%  | @ | 1.00  |
| " Powdered.                | .24   | @ | 1.00  |
| Tannic.                    | 1.05  | @ | 1.20  |
| Alcohol, Grain, per gal.   | .28   | @ | .22   |
| (Less rebate.)             |       |   |       |
| Wood, 95007.               | ...   | @ | 1.40  |
| Diamond Menthall           | ...   | @ | 1.50  |
| Alum, Lump, per 100 lb.    | 1.75  | @ | 1.85  |
| Ground, per 100 lb.        | 1.85  | @ | 1.85  |
| Antifebrine, per oz.       | .19   | @ | .20   |
| Antipyrine, per oz.        | .20   | @ | 1.40  |
| Arrow root, Bern. lb.      | .77   | @ | .35   |
| St. Vincent, in bbl., lb.  | .11   | @ | ...   |
| Arsenic:                   |       |   |       |
| Red Saxon, lb.             | .05%  | @ | .06%  |
| White.                     | .03%  | @ | .03%  |
| Balsam, Copaiba, lb.       | .31   | @ | .38   |
| Fir, Canada, gal.          | .65   | @ | 2.90  |
| Fir, Oregon, gal.          | .75   | @ | .80   |
| Peru, lb.                  | 1.60  | @ | 1.65  |
| Tolu, lb.                  | .20   | @ | .22   |
| Mark, Buckthorn, per lb.   | .40   | @ | ...   |
| Cacaca Sagrada, lb.        | .06   | @ | .07   |
| Elm, lb.                   | .10   | @ | .12   |
| Sassafras, per lb.         | .08   | @ | .08%  |
| Soap, lb.                  | .04%  | @ | .05   |
| Bicarb. Soda, Engl., lb.   | .03%  | @ | .03%  |
| domestic, lb.              | .90   | @ | 3.00  |
| Bichromate, Pot'h, lb.     | .10%  | @ | .11   |
| Blamuth, Sub. Nit.         | ...   | @ | ...   |
| per lb., bulk.             | 1.05  | @ | 2.00  |
| Bismuth, Sub. Carb.        | ...   | @ | ...   |
| per lb., bulk.             | 2.25  | @ | 2.30  |
| Bleach'g Powd., per lb.    | .02%  | @ | .03   |
| Blue Vitriol, lb.          | .03%  | @ | .03%  |
| Borax, refined, lb.        | .08   | @ | .08%  |
| Concentrated, lb.          | .07%  | @ | .08   |
| Brimstone, best sd, ton    | 19.50 | @ | 20.00 |
| Bromide Potash, Do-        |       |   |       |
| mestic, b'l, lb.           | .33   | @ | .34   |
| bottles, lb.               | .39   | @ | .40   |
| Bromide Ammonium,          |       |   |       |
| bulk.                      | ...   | @ | .43   |
| Bromide Sodium, b'l.       | ...   | @ | .38   |
| Bromine, bulk.             | .38   | @ | .42   |
| Burgundy pitch, per lb.    | .08%  | @ | .08%  |
| Cacao Butter:              |       |   |       |
| 12-lb. boxes, lb.          | .30   | @ | .31%  |
| Dutch A., per lb.          | .34   | @ | .35   |
| Caffeine.                  | 1.95  | @ | ...   |
| Camphor, ref'd, bbls., lb  | .48%  | @ | .49   |
| cases, lb.                 | .51   | @ | ...   |
| Cantharides, Chinese, lb.  | .28   | @ | .30   |
| Russian, lb.               | .28   | @ | .28   |
| Carb. Ammonia.             | ...   | @ | ...   |
| cases, lb.                 | .08%  | @ | .09   |
| Camia Buds, lb.            | .18   | @ | .18%  |
| Castor Oil, cases, lb.     | .15   | @ | .15%  |
| Barrels, lb.               | .14%  | @ | .15   |
| Caustic Soda, 70%, 100 lb. | .90   | @ | 2.82% |
| Caustic Soda, 60%, 100 lb. | .90   | @ | 3.10  |
| Chalk, Engl. Precip.,      |       |   |       |
| bulk, lb.                  | .04   | @ | .06   |
| Chloral Hydrate Cry-       |       |   |       |
| stals, bulk, per lb.       | .95   | @ | 1.05  |
| Hydrate crusts, bulk,      |       |   |       |
| per lb.                    | .92   | @ | 1.00  |
| Chlorate Pot. Cryst., lb.  | .16%  | @ | ...   |
| Pow'd, lb.                 | .16%  | @ | .17   |
| Chloroform, Bulk, lb.      | .50   | @ | .51   |
| Chinchonidine Sulphate     |       |   |       |
| of German, oz.             | .08   | @ | .08%  |
| Citrate, U. S. F. Iron,    |       |   |       |
| lb.                        | ...   | @ | .59   |
| Soluble.                   | ...   | @ | .55   |
| Iron and Ammonia,          |       |   |       |
| lb.                        | ...   | @ | .90   |
| Iron and quinine.          | 1.90  | @ | 1.55  |
| Iron and strychnine.       | 2.00  | @ | 2.05  |
| Phosphate, U. S. P., lb.   | ...   | @ | .57   |
| Pyrophos., U. S. P., lb.   | ...   | @ | .55   |
| Pyrophos., Soluble, lb.    | ...   | @ | .55   |
| Potash, per lb.            | ...   | @ | .49   |
| Soda, per lb.              | ...   | @ | .49   |
| Cobalt, pow'd, lb.         | .20   | @ | .18   |

|                            |       |   |       |
|----------------------------|-------|---|-------|
| Cocaine Muriate, per oz.   | 5.25  | @ | 6.20  |
| Codine, bulk, oz.          | 4.15  | @ | ...   |
| Codine, eight.             | 4.65  | @ | ...   |
| Cod Liver Oil, Nor-        |       |   |       |
| wegian, bbls.              | 18.50 | @ | 22.50 |
| Colocynth:                 |       |   |       |
| Trieste, lb.               | .30   | @ | .38   |
| Spanish.                   | .20   | @ | .22   |
| Copperas, per 100 lb.      | .75   | @ | .90   |
| Cr. Tartar, Crystals, lb   | .19%  | @ | .90   |
| Powdered, lb.              | .20   | @ | .80%  |
| Cubeb Berries, S&S, lb.    | .25   | @ | ...   |
| Ordinary, lb.              | .26   | @ | .30   |
| Cutch, bales, SM, lb.      | .04%  | @ | .05   |
| Cutch, boxes lb.           | ...   | @ | .09   |
| Cuttle bones, Trieste, lb  | ...   | @ | .12%  |
| Jewelers' lb.              | .35   | @ | ...   |
| Dextrine.                  | .04%  | @ | .05   |
| Divl Divl, per ton.        | 45.00 | @ | 55.00 |
| Dragon's B'd, lump, lb     | ...   | @ | ...   |
| In needs, lb.              | .45   | @ | .50   |
| Epsom Salts, per 100 lb.   | 1.00  | @ | 1.10  |
| Ergot:                     |       |   |       |
| G'm'n and Russ'n, lb       | .40   | @ | .42   |
| Spanish, lb.               | .48   | @ | .50   |
| Ergotine, Domestic.        | ...   | @ | 4.00  |
| German.                    | 4.00  | @ | ...   |
| Flowers:                   |       |   |       |
| Arnica Flowers, per lb     | .11   | @ | .12   |
| Chamomile.                 | ...   | @ | ...   |
| German, New, lb.           | .23   | @ | .25   |
| Roman, New.                | ...   | @ | .20   |
| Roman, lb., old.           | .12   | @ | .20   |
| Lavender Flowers           |       |   |       |
| Ordinary, per lb.          | .04   | @ | .08   |
| Select, per lb.            | .15   | @ | .05   |
| Gambler, lb.               | .04%  | @ | .04   |
| Glycerin, bbls, lb         | .13%  | @ | .4    |
| cases, lb.                 | .14   | @ | .16%  |
| Grains, Paradise, lb.      | .07   | @ | .07%  |
| Guarana, lb.               | 1.05  | @ | 1.10  |
| Gums:                      |       |   |       |
| Aloes, Barb, lb.           | .06   | @ | .12   |
| " Cape, lb.                | .05%  | @ | .08   |
| " Curacao, lb.             | .05%  | @ | .03   |
| " Socotrine, lb.           | .28   | @ | .40   |
| Arabic, sorts.             | .14   | @ | .15   |
| Asafetida, lb.             | .10   | @ | .28   |
| Benzoin, lb.               | .20   | @ | .38   |
| Chicle, lb.                | .8%   | @ | .55   |
| Gamboge, lb.               | .55   | @ | .60   |
| Gualac, lb.                | .17   | @ | .25   |
| Kino, lb.                  | ...   | @ | .75   |
| Mastic, lb.                | .75   | @ | 1.00  |
| Myrrh, lb.                 | .20   | @ | .38   |
| Olibanum, sorts, lb.       | .05%  | @ | .06%  |
| " tears, lb.               | .11   | @ | .13   |
| Sandrac, lb.               | .29   | @ | .30   |
| Senegal, picked, lb.       | .14   | @ | .60   |
| sorts, lb.                 | .11   | @ | .12   |
| Shellac, DC, lb.           | .27   | @ | .27%  |
| VSO, lb.                   | .24   | @ | .27   |
| " Diam'd I, lb.            | ...   | @ | ...   |
| " SS, lb.                  | .27   | @ | .27%  |
| " TN, lb.                  | .25   | @ | .25%  |
| " Garnet.                  | .22   | @ | .23   |
| " Bleached, lb             | .26   | @ | .27   |
| Tragacanth, Aleppo, lb.    | .48   | @ | .65   |
| Harlem Oil.                | ...   | @ | .50   |
| Indigo, lb.                | .45   | @ | 2.00  |
| Insect Pdr. (uncol'd), lb. | .16   | @ | .24   |
| Iodide Potash, bulk, lb.   | 2.70  | @ | .75   |
| " bot's, lb.               | 2.73  | @ | .88   |
| Isinglass, Am'r'n, lb.     | .47%  | @ | .60   |
| Japan, lb.                 | .35   | @ | ...   |
| Juniper Berries, lb.       | .01%  | @ | .08%  |
| Leaves:                    |       |   |       |
| Belladonna, per lb         | .11   | @ | .12   |
| Buchu, short, lb.          | .12   | @ | .15   |
| " long, lb.                | .35   | @ | .40   |
| Coca, prime, lb.           | .21   | @ | .35   |
| Damiana, lb.               | .27   | @ | ...   |
| Hycoscyamus, lb.           | .21   | @ | ...   |
| Jaborandi, lb.             | .40   | @ | .48   |
| Senna Alex nat'l, lb.      | .18   | @ | .20   |
| Senna Alex garbled lb      | .28   | @ | .27   |
| Senna Tinney, lb.          | .28   | @ | .20   |
| Stramonium.                | .05%  | @ | .08   |
| Licorice, P. & S, lbs.     | 1.24  | @ | ...   |
| Lupulin, German.           | .60   | @ | .45   |
| Lycopodium, lb.            | .53   | @ | .55   |
| Manna, large flake, lb.    | 1.20  | @ | 1.25  |
| Small flake, lb.           | .45%  | @ | .45   |
| Menthol, Japanese, per     |       |   |       |
| lb.                        | ...   | @ | 3.75  |
| Mercurials:                |       |   |       |
| Blue Pill, lb.             | .24   | @ | ...   |
| Calomel, lb.               | .171  | @ | ...   |
| Cor. Sublimite, lb.        | .62   | @ | ...   |
| Mercury and Chalk.         | .30   | @ | ...   |
| Ointment, lb.              | .30   | @ | .39   |
| Red Precipitate, lb.       | .81   | @ | ...   |
| White.                     | .86   | @ | ...   |
| Morphine, bulk, oz.        | 1.90  | @ | .905  |
| Eight, oz.                 | 2.30  | @ | .35   |
| Moss, Irish, lb.           | .06   | @ | .06%  |
| Irish, bleached, lb.       | .13   | @ | .15   |
| Muriate Potash, per 100    |       |   |       |
| lbs.                       | 1.78  | @ | 1.85  |
| Naphthaline, flake, per    |       |   |       |
| lb.                        | .03%  | @ | .05   |
| Naphthaline, Ball, per     |       |   |       |
| lb.                        | ...   | @ | .05   |
| Nitrate Silver, oz.        | .48   | @ | .40%  |
| Nitrate Soda, 100 lb.      | 1.65  | @ | 1.80  |

|                           |       |   |       |
|---------------------------|-------|---|-------|
| Nux Vomica, lb.           | .07%  | @ | .04   |
| Nutgalla, China, per lb.  | .13   | @ | .13%  |
| Aleppo, per lb.           | .14   | @ | .14%  |
| Oils, Essential:          |       |   |       |
| Anise.                    | 1.35  | @ | 1.40  |
| Almonds, Bitter.          | 7.50  | @ | ...   |
| " Sweet.                  | .80   | @ | .43   |
| Bay, per lb.              | 3.50  | @ | 4.00  |
| Bergamot.                 | 2.00  | @ | 3.00  |
| Cajeput, Native.          | .45   | @ | .55   |
| Camphor.                  | .07   | @ | .08   |
| Cassa.                    | .80   | @ | .85   |
| Citronella, Native.       | .24   | @ | .28   |
| Clove.                    | .60   | @ | .70   |
| Copaiba.                  | .65   | @ | .70   |
| Croton.                   | .75   | @ | .80   |
| Cubeb.                    | 2.50  | @ | 2.60  |
| Erigeron, per lb.         | 1.60  | @ | 1.85  |
| Geranum Chris.            | 4.50  | @ | 7.50  |
| Lavender.                 | 1.80  | @ | 1.85  |
| " Garden.                 | .40   | @ | .90   |
| Lemon, as to brand.       | 1.10  | @ | 2.80  |
| Lemongrass.               | .75   | @ | ...   |
| Musk, per lb.             | 7.00  | @ | 8.00  |
| Myrrane.                  | .17   | @ | .19%  |
| Neroli.                   | 22.00 | @ | 29.00 |
| Nutmeg.                   | 1.75  | @ | 2.75  |
| Orange.                   | 1.50  | @ | 1.90  |
| Origanum.                 | .84   | @ | ...   |
| Pennyroyal.               | 1.40  | @ | 1.50  |
| Peppermint, bulk.         | 2.45  | @ | 2.65  |
| " HGH.                    | 2.70  | @ | 2.80  |
| Rose.                     | 6.50  | @ | 7.00  |
| Sandalwood.               | ...   | @ | 2.85  |
| Sassafras.                | .26   | @ | .38   |
| Sassafras, Artificial.    | .24   | @ | .27   |
| Spearment.                | 1.50  | @ | 1.90  |
| Tansy.                    | 8.00  | @ | 3.00  |
| Wintergreen.              | 1.65% | @ | 1.70  |
| " Artificial.             | 1.20  | @ | 1.25  |
| Wormwood.                 | 2.25  | @ | ...   |
| " HGH.                    | ...   | @ | 3.75  |
| Opium, Natur'l, ca., per  |       |   |       |
| lb.                       | 2.40  | @ | 2.45  |
| Opium, Ordinary.          | ...   | @ | 2.70  |
| Jobbing, per lb.          | 2.50  | @ | 3.45  |
| Opium, Powd., per lb.     | 3.35  | @ | 3.45  |
| Phenacetine, per oz.      | .85   | @ | .90   |
| Prussiate Potash, Yel-    |       |   |       |
| low, per lb.              | .21%  | @ | .22   |
| Red, per lb.              | .39   | @ | .42   |
| Quicksilver, flasks, per  |       |   |       |
| lb.                       | ...   | @ | .54   |
| Quinine:                  |       |   |       |
| Domestic, bulk, oz.       | .22   | @ | ...   |
| Domestic, ozs.            | .28   | @ | .29   |
| German, bulk.             | .18   | @ | .18%  |
| German, ozs.              | .27   | @ | .28   |
| Roots, Aconite, lb.       | .09   | @ | .14   |
| Althea, cut, lb.          | .15   | @ | .18   |
| Alkanet, lb.              | .06   | @ | .07   |
| Arnica, lb.               | .12   | @ | .13   |
| Belladonna Ger., lb.      | .08   | @ | .12   |
| Blood, lb.                | .05   | @ | .06   |
| Calamus, lb.              | .07   | @ | .08   |
| Calamus, bleac'd, lb.     | .21   | @ | .24   |
| Colicium, per lb.         | .14   | @ | .18   |
| Colombo, lb.              | .06%  | @ | .11   |
| Dandelion, Germ. lb.      | .07%  | @ | .08   |
| Dogwood, lb.              | .08   | @ | .10   |
| Galangal, lb.             | .04%  | @ | .04%  |
| Genstan, lb.              | .03%  | @ | .04   |
| Ginseng, lb.              | 1.75  | @ | 2.75  |
| Ginger, Jamaica,          |       |   |       |
| bicld., lb.               | .17   | @ | .20   |
| Ginger, Jamaica,          |       |   |       |
| unbicld., lb.             | .14   | @ | .17   |
| Golden Seal, lb.          | .22   | @ | .23   |
| Hellebore, powd., lb.     | .07%  | @ | .08   |
| Ipecac, lb.               | 1.45  | @ | 1.55  |
| Jalap, lb.                | .22   | @ | .24   |
| Kava Kava, lb.            | .08   | @ | .15   |
| Licorice, select, lb.     | .05   | @ | .12   |
| Pow'd, lb.                | .05   | @ | .12   |
| Lovage, lb.               | .59   | @ | .59   |
| Mandrake, lb.             | .03%  | @ | .04   |
| Orria, Florentine, lb.    | .25   | @ | .35   |
| Orria, Verona.            | .25   | @ | .25   |
| Pink, lb.                 | .22   | @ | .25   |
| Rhubarb, whole, lb.       | .70   | @ | .80   |
| Sarsaparilla, Hond, lb.   | .39   | @ | .42%  |
| Sarsaparilla, Mex, lb.    | .08   | @ | .08%  |
| Senega, lb.               | .54   | @ | ...   |
| Serpentaria, lb.          | .21   | @ | .30   |
| Valerian, Belgian, lb.    | .07   | @ | .07%  |
| " German, lb.             | .10   | @ | .12   |
| Saffron, Amn., lb.        | .50   | @ | .55   |
| Spanish, Valencia, lb.    | 6.50  | @ | 7.00  |
| Spanish, Alicante, lb.    | 5.00  | @ | 5.50  |
| Sal Ammoniac, lump, lb.   | .08%  | @ | ...   |
| Do. Granulated, lb.       | .05%  | @ | .09   |
| Sal Soda, Eng., 100 lb.   | .97%  | @ | 1.00% |
| " American.               | .90   | @ | .95   |
| Salt peter, crude, per lb | .04%  | @ | .05   |
| Salt peter, Refined, per  |       |   |       |
| lb.                       | .06   | @ | .08   |
| Seeds, Anise, Ital, lb.   | .00   | @ | .10   |
| Anise, German, lb.        | .06   | @ | .06%  |
| Anise, Star, lb.          | .22   | @ | .23   |
| Canary, Smyrna, lb.       | .34%  | @ | .03%  |
| Canary, Sicily, lb.       | .00%  | @ | .04   |
| Caraway, lb.              | .06   | @ | .06%  |
| Cardamon, Aleppy,         |       |   |       |
| per lb.                   | .65   | @ | .75   |
| Celery, lb.               | .12   | @ | .13   |

|   |       |   |       |
|---|-------|---|-------|
| Cardamon, Malabar, per lb.....              | .75   | @ | .85   |
| Colchicum, lb.....                          | .12   | @ | .14   |
| Coriander, lb.....                          | .08%  | @ | .09%  |
| Cummin, lb.....                             | .11   | @ | ..    |
| Fennel, Germ., lb.....                      | ..    | @ | .22   |
| Flax Meal, per lb.....                      | ..    | @ | .02   |
| Foenugreek, lb.....                         | .08%  | @ | .09   |
| Hemp, Russian, lb.....                      | .08%  | @ | ..    |
| Mustard, yel. Cal. lb.....                  | .06%  | @ | .07%  |
| Mustard, brown, Cal. lb.....                | ..    | @ | ..    |
| Poppy, per lb.....                          | .09%  | @ | .04%  |
| Onion, German, lb.....                      | .45   | @ | .50   |
| Rape, German, lb.....                       | .03   | @ | .04%  |
| Rape, English, lb.....                      | .05%  | @ | .06   |
| Soap, Castile, Mars, mottled, pure, lb..... | .06   | @ | .06%  |
| White, lb.....                              | .09%  | @ | .10   |
| Soda Ash, lb., 48% per 100 lb.....          | 2.00  | @ | ..    |
| Squills, white, lb.....                     | .04%  | @ | .06   |
| Sugar Mill, powd., lb.....                  | .15   | @ | .17   |
| Sugar Lead, white, lb.....                  | .11   | @ | .11%  |
| Lead, brown, lb.....                        | .05%  | @ | .06   |
| Sulphate Ammonia, per 100 lb.....           | 2.90  | @ | 3.00  |
| Do. Potash, 48% per lb.....                 | 1.11% | @ | 1.15  |
| Do., Potash, 90% per lb.....                | 2.10  | @ | 2.15  |
| Sulphur, Rolf.....                          | ..    | @ | .01%  |
| Flour.....                                  | ..    | @ | .01%  |
| Spirits Nitre, U. S. P.....                 | .39   | @ | .40   |
| Spirit Ammonia, Arom.....                   | .44   | @ | .45   |
| Sulphuric Ether.....                        | .54   | @ | .61   |
| Sumac, Sicily, 100.....                     | 79.00 | @ | 77.00 |
| Virginia.....                               | 43.00 | @ | 47.50 |
| Tar, Barbadoes, gal.....                    | ..    | @ | .45   |
| Tin Crystals, bbls., per lb.....            | .15   | @ | ..    |
| Tea, per lb.....                            | .17   | @ | ..    |
| Tonka Beans, Angost., lb.....               | 1.65  | @ | 2.10  |
| Tonka Beans, Paraguay, lb.....              | .55   | @ | .65   |
| Surinam.....                                | .71   | @ | ..    |
| Turpentine, Spirits.....                    | .35   | @ | .32   |
| Vanilla Beans, lb.....                      | 6.50  | @ | 11.00 |
| cut, lb.....                                | 4.50  | @ | 5.25  |
| Venice Turpentine, barrels, lb.....         | .18   | @ | .19   |
| Cane, lb.....                               | .10   | @ | .20   |
| Wax, Brazil, Veg., lb.....                  | .09%  | @ | .17%  |
| Japan, lb.....                              | .07%  | @ | .08   |

Animal and Vegetable Oils.

|   |      |   |      |
|---|------|---|------|
| Linseed, City, raw, gal.....                | ..   | @ | .50  |
| Linseed, City, boiled, gal.....             | ..   | @ | .43  |
| Linseed, Western, raw, gal.....             | ..48 | @ | .40  |
| Lard, City, Ex. Winter, gal.....            | 1.00 | @ | ..   |
| Lard, City, Prime, present make, gal.....   | .72  | @ | .73  |
| Lard, City, Extra No. 1, gal.....           | .55  | @ | .65  |
| Lard, City, No. 1, gal.....                 | .50  | @ | .55  |
| West, prime, gal.....                       | .75% | @ | .73  |
| Cotton-seed, C r u d e, grades, gal.....    | .36  | @ | .37  |
| Cotton-seed, Summer Yellow, prime, gal..... | .42  | @ | .43  |
| Cotton-seed, Summer Yellow, off grades..... | .40  | @ | .41  |
| Cotton-seed, Winter Yellow, gal.....        | .54  | @ | .56  |
| Cotton seed, Winter White, gal.....         | .55  | @ | .57  |
| Sperm, Crude, gal.....                      | .75  | @ | .80  |
| Sperm, Natural Spring gal.....              | .83  | @ | .86  |
| Sperm, Bleached Spring gal.....             | .84  | @ | ..   |
| Sperm, Natural Winter, gal.....             | .90  | @ | .91  |
| Sperm, Bleached Winter, gal.....            | .98  | @ | .96  |
| Whale, Crude, gal.....                      | ..   | @ | ..   |
| Whale, Natural Winter, gal.....             | 5.50 | @ | ..   |
| Whale, Bleached Winter, gal.....            | 5.50 | @ | ..   |
| Whale, Ex. Bl'ch'd, gal.....                | .57  | @ | ..   |
| Menhaden, Crude, Sound, gal.....            | .40  | @ | ..   |
| Dark, pressed, gal.....                     | .40  | @ | .43  |
| Light, pressed, gal.....                    | .42  | @ | .48  |
| Bleached, Winter, gal.....                  | .45  | @ | ..   |
| Extra Bleached, gal.....                    | .48  | @ | ..   |
| Tallow, City, prime gal.....                | .70  | @ | .75  |
| Western, prime, gal.....                    | .65  | @ | .70  |
| Cocconut, Ceylon, lb.....                   | .06% | @ | ..   |
| Cochin, lb.....                             | ..   | @ | .07% |
| Cod, Domestic, gal.....                     | .38  | @ | .40  |
| Foreign gal.....                            | .42  | @ | .45  |
| Red Blaine, gal.....                        | .44  | @ | .48  |
| Red Saponified, lb.....                     | .05% | @ | .05% |
| Bank, gal.....                              | .40  | @ | .42  |
| Strait, gal.....                            | .41  | @ | ..   |
| Olive oil, for table in tins.....           | 1.30 | @ | 1.85 |
| Olive, Com'n'ble, gal.....                  | .58  | @ | .60  |
| Neatfoot, prime, gal.....                   | .77  | @ | .80  |
| Palm, prime, Lagos, lb.....                 | .03% | @ | .06  |

# American Druggist and Pharmaceutical Record.

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|--|--------|
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## TO THE COLUMBIAN EXPOSITION.

THE schedule of the special A. P. A. excursion from Boston, New York, Philadelphia, Baltimore, Washington and intermediate points, has been slightly modified since our last issue and reads now as follows:

Leave Boston and the East as convenient, stop over privilege in New York.

Leave New York, Liberty street Friday, August 11 at 11 P.M.: arrive in Washington the 12th, at 6.30 A.M. Leave Philadelphia per special sleeper on regular train Chestnut and Twenty-fourth streets, August 12 at 8.15 A.M., Wilmington, 8.45 A.M. and Baltimore at 10.20, arriving at Washington at 11.35. The whole party will leave at 1 P.M., arriving in Chicago on Sunday.

## NOSTRUMS ON THE WANE.

THE patent medicine trade is in a bad way. This is evinced by the failure of an old patent medicine concern in this State which it is said has collapsed because the sales were not sufficient to pay the salaries of the officers. The other evidence of the shaky condition of the industry referred to is found in the prevailing distress among patent medicine firms which have long withstood the effects of financial stringency, substitution by druggists, and the countless other ills which affect the patent medicine body politic.

One of the most honest and straightforward critiques on the growth and development of nostrums is given by the editor of the *Shipping and Commercial List*: "All patent medicines," he remarks, "good, bad and indifferent,

are started on the road to success by proper advertising and it seems necessary to continue that policy if profits are to be earned." And again: "It is not so much a question of merit as of publicity. When not before the public eye constantly or at intervals a nostrum is soon forgotten and something else takes its place." This may not prove pleasant reading to *Printers' Ink* and its numerous progeny who are such earnest and public apologists of the nostrum dealers and manufacturers, but it is nevertheless very near to the actual truth, and we hardly think it will be possible to find a *Richardson* Quixote foolhardy enough to endeavor to lessen its force.

## PHARMACEUTICAL ANNEXATION.

THE Pharmaceutical Association of the Province of Quebec is sounding the pharmacists of the other Provinces as to the feasibility of organizing a general Canadian pharmaceutical association and of issuing under its auspices a Canadian Pharmacopœia. One of the immediate causes for this move is that prosecutions have been brought for adulteration without recognizing the fact that the only fault has been a misapprehension on the part of the dispenser as to whether the British, the French, or the United States Pharmacopœia should have been recognized as the authority in the preparation of the particular galenic in question.

While we must admit that some advantages may be gained by having a Canadian Pharmacopœia we scarcely think that those advantages would be commensurate with the expenditure of time, effort and money involved in its preparation. Rather let our friends "over the border" adopt the United States Pharmacopœia.

This work more than any similar one is catholic in its scope being adapted, as it is, to minister to the wants of sixty millions of people of almost every race and country, who have come to make their home within the three and a half million square miles of these United States.

In a large portion of Canada the United States Pharmacopœia is the generally accepted standard and it would be but a single step, and that a step in advance, to have it officially recognized by the several Provincial Parliaments just as it has been by a number of the States of the Union.

As to a national association it would no doubt do much good, but our Canadian confreres should remember that the A. P. A. is an *American* not simply a United States association.

**THE FAIR AS AN EDUCATOR.**

**J**OURNALISTS of all shades of opinion and belief have united in bearing willing testimony to the importance of the World's Fair as a great factor in the education of the people. Visitors competent to judge and express opinion have declared that, time and place taken into account, the Fair has never been equalled in respect of the influences toward higher conceptions of science and art, which exhibitions of its kind undoubtedly exert on all who are privileged to visit them; and it is being borne in upon everyone that, provided proper advantage is taken by exhibitors of the splendid opportunities at their disposal, all the arts and industries will alike be permanent gainers by this the grandest and most successful anniversary commemoration ever achieved by a civilized people.

An erroneous impression is generally current with the public in regard to the cost of medicines, and some good educational work might be accomplished by the various exhibitors of chemico-pharmaceutical products if they would affix labels to the large containers of rare chemicals, giving in plain figures the approximate cost of the drugs in grains, ounces and pounds. The public would then be less apt to grumble about druggists' charges since they would be likely to have a better knowledge of the true cost of drugs, and a greater respect for the skill of the pharmacist.

**MAKE THEM YOURSELF.**

**O**F all the various plans proposed for doing away with the evil of cutting prices on proprietary medicines the one which has met with the largest measure of success is that of "making them yourself."

It is true that this method has wrought relief only in individual cases but this is inherent in the very nature of things. It is an individual remedy for an individual evil, but had this individual remedy been generally applied twenty or even ten years ago the cry of "cut prices" would have caused no serious alarm.

An able and intelligent pharmacist of this State in discussing the commercial outlook at the last meeting of the New York State Association said: "Personally I am doing well despite the dull times and I attribute my prosperity to the change of policy which has led me to make my own proprietaries and pharmaceuticals whenever possible. I feel confident however, that, had I adopted twenty years ago the policy I now pursue I would be in very much better circumstances."

It is with a view to aiding our readers to follow the example of this prosperous pharmacist that this journal has spent so much money and time in securing and publishing the most approved practical and valuable formulas for the preparation of pharmaceutical specialties.

The paper presented this week under the title of "How to make them yourself," is a valuable contribution toward the knowledge of how to go about this

work to the best advantage and we hope that the information may be utilized by many of our readers, and that its use may bring them increased gain.

It must not be supposed, however, that in commending to the special attention of our readers this means of combatting the cutting evil we mean to ignore the broader methods which lie within the scope of organization to utilize.

The improvement in musketry does not do away with the usefulness of artillery, and in this warfare no armor tactics should be neglected which promise honorable victory.

**PRACTICAL PHILANTHROPY.**

**C**ONSIDERABLE newspaper space was devoted to the suit brought by a physician of this city to recover an unusually large fee some months ago, but in the discussion of the justice or injustice of the charge one phase of the question was given little if any prominence, and this is the amount of charity work done by physicians.

In the larger cities where there are hospitals, dispensaries, etc., the profession give their services as visiting and consulting physicians to these institutions, in the large majority of cases, without any remuneration whatever. In the rural districts in the absence of organized charity each physician is called upon to and does devote a not insignificant portion of his time to the care of people from whom he can never hope to receive any remuneration. It is by charging apparently high prices for the services rendered the wealthy that the physician is enabled to devote so much time to charity work and still earn a livelihood.

A similar state of affairs exist, in pharmacy, though since the demands of charity are not so exacting the charges of the pharmacist to the wealthy are not so much out of proportion to the charges made to the indigent as are those of the physician.

In the cities a charity tax is indirectly levied upon the pharmacist by the practice of the dispensaries of eleemosynary institutions furnishing medicines either free or at a merely nominal price. If this attendance and medicine were furnished to paupers only, neither physicians nor pharmacists would be the losers; but, as was pointed out in the article on the dispensaries of New York, which appeared in these columns some weeks since, a large number of these dispensary patients are far from being proper objects for the bestowal of charity, since they are well able to pay for the service and medicine furnished. It may be that the necessity of having an abundance of clinical material at hand renders less keen the discrimination against the well-to-do, which should be exercised in the public dispensary.

Being able to procure medicines either free or at a merely nominal price at the dispensary, the patients naturally do not give the pharmacist any prescription business, thus cutting off one of the most profitable branches of his custom and levying an involuntary contribution to what is in too many cases an undeserved charity.

Aside from this indirect tax on the pharmacist there is a direct tax in the *p. p.* of the physicians, who, stumbling on some deserving poor outside the dispensary service, vouches to the pharmacist by his *p. p.* on the prescription that the patient is in real want, a genuine *poor patient*. This sign on a prescription when put in good faith is, we feel confident, never disregarded by the dispenser.

These special demands of his calling are met by the pharmacist cheerfully and promptly, but to do so it is necessary, in justice to his own family, for him to charge a sufficiently high price to the wealthy to maintain the average of his charges on a living basis. More might be made of this view in the inevitable argument as to prices which is forced upon the pharmacist by so many of his customers.

This view of charity may seem sordid and narrow at first sight, but a little consideration will show that it merely reflects the basis upon which any charity involving pecuniary, not bodily, aid is based. It is by the toil of the many that the few grow wealthy, and the possession of the gift which enables him to rise above his fellows imposes an obligation on the successful man to share the burdens of the poor. This he does in various ways, his direct contributions to charity being, in many cases, the least important of them, while the largest share of his contributions are made in the higher price, which he pays for service of all sorts, including that of the pharmacist and of the physician.

#### THE SALE OF INTOXICANTS.

WHAT has been for long a subject of reproach among the more ethical minded of the pharmaceutical profession is the disposition of some pharmacists to embark on the flimsiest of excuses in the sale of alcoholic stimulants. This is to be observed in all large cities despite the regulations which have been drawn up for its restriction to the persons in whose hands the traffic properly belongs; and the existence of establishments which to the public eye appear as pharmacies and in nowise different from stores doing a legitimate business save in the surreptitious sale of intoxicants, is a serious reflection on the whole profession. The recent enactment in this State of laws having for their object the closer restriction of the sale of intoxicating liquors to saloon keepers cannot be regarded as other but a step in the right direction, and this notwithstanding the fierce protests which the measure has called forth from interested parties. For these very protests, based on the mistaken notion that the rights of the retail druggist had been invaded and that druggists were to be no longer allowed to dispense liquors ordered as the component ingredients of prescriptions, only went to prove the necessity which existed for legislation of this kind. The fact, too, that the measure was brought forward by the saloon-keeping element as a means of defending themselves against what was termed "competition from druggists" was also fair evidence of the need which called it forth.

We have referred in these columns on other occasions to the Chicago method of dealing with the sale of alcohol and intoxicating liquors by druggists, and have expressed the conviction that were the law properly enforced the ordinance would prove most beneficial to pharmacists and the public generally. On comparing the Chicago ordinance with the laws affecting the sale of intoxicants by pharmacists in this State, it will be seen that no great difference exists between them. Both are intended for the prevention of the indiscriminate sale of liquors and of any illegal diversion of moneys belonging properly to the State as State taxes.

Going farther afield than New York or Chicago we find in Iowa—noted for its prohibition tendencies—a state of affairs which may well be termed deplorable. For there we have every evidence that the peculiar form of law by which the State is governed in this regard is almost powerless to accomplish the chief end of its creation, *viz.*, the restriction of the liquor traffic. The licensed saloon has been abolished, it is true, but only to appear in another form. In its place has appeared a drug store,—so called, the proprietor of which is only rarely a licensed pharmacist or one who might lay claim to a knowledge of pharmacy. The simple fact, and we say it without intending to reflect on the merits of the Iowa Board of Pharmacy Commissioners, which is a most efficient body, is that men are allowed to become *de facto* proprietors of pharmacies who would not be recognized as such by the law.

Notwithstanding an occasional observation to the contrary, it may be said with truth that no class is more jealous of its fair fame than pharmacists. They may not have the *esprit de corps* which distinguishes the medical profession, but this comes of the rivalry which is almost unavoidable from the commingling of the commercial with the professional aspects of the calling, conditions which we have good reason to believe will become less apparent as times goes on and pharmacists come to have a fuller knowledge each of the other as well as of the advantages which come from a leveling of the petty jealousies which bar the way to successful organization. Were organization more perfect and the powers of pharmacy boards less limited, it is needless to say that the imputations on pharmacy and pharmacists which we are treated to with such frequency by the daily press of nearly all the prohibition States from Maine to Kansas, would become less and the status of the profession correspondingly elevated. The history of pharmacy in this country is a continuous record of progress toward a higher conception as to the responsibilities of the individual pharmacist, and the natural sequence has been a collective increase of respect on the part of the community for the pharmacist and his avocation. When this comes to be more fully recognized it may be that our solons will appreciate the fact that *development* comes through responsibility, and that it is only by making pharmacists themselves responsible for the proper carrying out of the laws that success in the direction of securing their proper execution will be assured.

*Written for the American Druggist and Pharmaceutical Record.*

## HOW TO MAKE THEM YOURSELF.

BY GALEN, JR.

At this time, when there is such a hue and cry being raised against patent medicines, it may be well to consider means of overcoming the evil. It cannot be denied that the evil is a crying one, but extreme or intemperate utterances are nevertheless uncalled for. The fact that abuse is not argument and that many statements have frequently no foundation in fact should not be lost sight of. The pharmacist has much to contend with, and among the greatest is the continual production of new medicines and the ruinous cutting of prices. The people who use patent medicines will buy them some where, and if the pharmacist wishes to hold trade he will of course have to keep them in stock. How can he make their sale harmonize with his interests? What is the best course to pursue to mitigate the patent medicine nuisance? Shall he buy non-secrets and endeavor to sell them in the place of the proprietary goods? Or shall he put up a line of goods himself and replace articles from the sale of which he derives no legitimate profit? Neither of the above will in the opinion of the writer be found profitable. Again, this course is not doing justice to the many upright and good business firms who have spent both their time and money to create a demand for the articles of their manufacture; and such a course would be likely to work more harm than benefit.

Again many pharmacists think that any patched up formula will do. They seem to forget that behind these patents are many men of brain and ability and that such men have more sense than to attempt to force a sale on goods having no merit, or if having merit, but very little. The pharmacist will find that in order to replace patent and proprietary medicines with those of his own manufacture that he must at least equal them in merit and also in appearance. The writer does not wish to be understood as favoring patents. On the contrary he believes that the druggist can replace the goods to a large extent with preparations of his own; but he believes that first and foremost of all, he should possess reliable formulas. He must put the goods up in presentable shape and at first confine his efforts to a limited line and gradually extend the number. If having a superior preparation he sells it to a customer to whom it gives satisfaction or benefits, it will nine times out of ten prove a good advertisement since that customer will take pains to recommend it to others. Every druggist has a demand for a good blood remedy or cough cure, and to satisfy this he may offer his own goods and harm no one if they fail to effect a cure. The formulas offered below have had the advantage of extended trial and have proven good. The writer does not claim that they are better than others, but he is confident that they will afford good reliable preparations if directions are carefully followed.

### Headache Remedies.

Headache remedies have come to be staple proprietary medicines in every pharmacy. They are found in the market as wafers, capsules, powders and caffer-vescent salts.

Most, if not all of them, contain acetanilid and caffeine. The following formulas are easily prepared and furnish excellent preparations of their kind.

#### HEADACHE POWDERS.

|                       |                     |
|-----------------------|---------------------|
| Acetanilid.....       | 3 grains            |
| Caffeine.....         | $\frac{1}{4}$ grain |
| Bicarbonate soda..... | 3 grains            |

Mix thoroughly.

This makes one pill or powder or wafer, as the dealer may choose to make it.

|                      |                     |
|----------------------|---------------------|
| Acetanilid.....      | 3 grains            |
| Salicylate soda..... | 3 grains            |
| Caffeine.....        | $\frac{1}{4}$ grain |

Mix. Make one capsule or wafer.

|                 |                     |
|-----------------|---------------------|
| Acetanilid..... | 3 grains            |
| Salicine.....   | 4 grains            |
| Caffeine.....   | $\frac{1}{4}$ grain |

Mix. Make in capsule or wafer.

This makes a very efficient remedy, but it is bitter to the taste and should be dispensed as a wafer or capsule.

#### BROM-ACETANILID AND CAFFEINE.

|                        |            |
|------------------------|------------|
| Bromide potassium..... | 300 grains |
| Caffeine.....          | 30 grains  |
| Acetanilid.....        | 60 grains  |
| Bicarb. soda.....      | 600 grains |
| Tartaric acid.....     | 540 grains |
| Sugar.....             | 440 grains |

All the substances should be thoroughly dried and intimately mixed; then moistened with alcohol and rubbed through a No. 12 sieve and dried thoroughly.

Each heaping teaspoonful contains about 10 grains bromide potassium, 3 grains acetanilid, and 1 grain caffeine. The above headache remedies are fairly representative of the preparations in the market and will be found very efficient.

#### Blood Purifiers.

One of the patents most easily sold by the dealer is a good blood remedy. Any one of the following will be found to be excellent. They are easily prepared, and afford agreeable preparations.

#### COMPOUND SYRUP SARSAPARILLA AND STILLINGIA.

|   |          |
|---|----------|
| Red clover.....                                   | 6 ounces |
| Stillingia.....                                   | 8 ounces |
| Sarsaparilla.....                                 | 8 ounces |
| Prickly ash bark.....                             | 8 ounces |
| Licorice.....                                     | 3 ounces |
| Coriander.....                                    | 1 ounce  |
| Anise.....  | 1 ounce  |
| Wintergreen.....                                  | 1 ounce  |
| Senna.....  | 4 ounces |
| Iodide potass.....                                | 3 ounces |
| Alcohol 33 $\frac{1}{3}$ per cent. a sufficiency. |          |

Percolate the coarsely powdered drugs after macerating for 12 hours with 33 $\frac{1}{3}$  per cent. alcohol until 6 pints are obtained, then dissolve 4 lbs. sugar in this by agitation; lastly add the iodide of potassium and dissolve.

#### SYRUP RED CLOVER COMPOUND.

|   |          |
|---|----------|
| Red clover.....                                   | 8 ounces |
| Stillingia.....                                   | 4 ounces |
| Berberis aquifolia.....                           | 8 ounces |
| Prickly ash berries.....                          | 1 ounce  |
| Burdock root.....                                 | 4 ounces |
| Poke root.....                                    | 1 ounce  |
| Sarsaparilla.....                                 | 4 ounces |
| Iodide potass.....                                | 3 ounces |
| Oil wintergreen.....                              | 30 drops |
| Alcohol 33 $\frac{1}{3}$ per cent. a sufficiency. |          |

After 12 hours' maceration percolate the powdered drugs to 5 pints. To 6 lbs. sugar add the oil of wintergreen, add the iodide of potassium to the percolate, dissolve sugar by percolation and make up to 1 gallon with simple syrup.

#### COMPOUND SYRUP STILLINGIA AND YELLOW DOCK.

|  |          |
|--|----------|
| Stillingia.....                                    | 8 ounces |
| Yellow dock.....                                   | 8 ounces |
| Senna.....   | 4 ounces |
| Prickly ash bark.....                              | 2 ounces |
| Licorice.....                                      | 3 ounces |
| Burdock.....                                       | 4 ounces |
| Coriander.....                                     | 1 ounce  |
| Anise.....   | 1 ounce  |
| Wintergreen.....                                   | 1 ounce  |
| Iodide potass.....                                 | 2 ounces |
| Alcohol, 33 $\frac{1}{3}$ per cent. a sufficiency. |          |
| Sugar.....   | 4 lbs.   |

After macerating the properly ground drugs with 33 $\frac{1}{3}$  per cent. alcohol for 12 hours, percolate to 6 pints, add the iodide of potassium and sugar to the percolate, dissolve by agitation and make up to 1 gallon with simple syrup.

## Cough Cures.

Another class of remedies that are ready sellers are cough syrups. With a good formula, a pharmacist should have no trouble in making a ready sale. The following formulas are offered, which have proved very satisfactory in the writer's own experience:

## SYRUP WHITE PINE COMPOUND.

|                  |           |                 |           |
|------------------|-----------|-----------------|-----------|
| Balm Gilead buds | Spikenard | Blood root, ss. | 5½ ounces |
| White pine       |           |                 | 20 ounces |
| Wild cherry      |           |                 | 40 ounces |
| Ipecac.          |           |                 | 4 ounces  |
| Sassafras        |           |                 | 2½ ounces |
| Acetate morphine |           |                 | 3 drams   |
| Chloroform       |           |                 | 5½ ounces |
| Alcohol, 1 part  |           |                 |           |
| Water, 2 parts   |           |                 | q. s.     |

After 12 hours' maceration of drugs reduced to coarse powder, percolate with above menstruum to 24 pints. In this dissolve 24 lbs. sugar by percolation and add ¾ gallon confectioner's glucose. Dissolve morphine in 8 ounces of water and add sufficient acetic acid to remove turbidity. Mix with syrup, add the chloroform and agitate well; add lastly enough simple syrup to make 40 pints.

This formula is a modification of the Syrup White Pine compound of the manufacturing pharmacist, and is a very efficient preparation. If combination with tar is thought desirable, ½ ounce of N. F. glycerite of tar can be added to each pint.

## SYRUP WILD CHERRY COMPOUND.

|                 |           |
|-----------------|-----------|
| Wild cherry     | 16 ounces |
| Spikenard       | 4 ounces  |
| Ipecac.         | 3 ounces  |
| Blood root      | 1 ounce   |
| Tinct. opium    | 4 ounces  |
| Alcohol, 1 part |           |
| Water, 2 parts  | q. s.     |

Macerate 12 hours and then percolate to 5 pints. Add the tincture opium and filter; then dissolve 6 lbs. sugar in filtrate by percolation and add enough simple syrup or glycerin to make one gallon. Tar can be added, if desired, as in the preceding formula:

## COMPOUND SYRUP OF TAR.

|                                      |          |
|--------------------------------------|----------|
| Fluid extract of licorice            | 2 ounces |
| Tinct. opium camphorat.              | 2 ounces |
| Syrup ipecac.                        | 2 ounces |
| Glycerite tar, N. F.                 | ¼ ounce  |
| Syrup tola, enough to make one pint. |          |

By using one-half the quantity of liquid extract of licorice made according to formula published recently in the PHARMACEUTICAL RECORD, a much nicer preparation can be obtained.

## Liniments.

The pharmacist is often called on for a good embrocation or liniment.

The following, which is for external use only, will be found to answer in most cases:

## HOME LINIMENT.

|                 |          |
|-----------------|----------|
| Cottonseed oil  | 8 ounces |
| Oil wintergreen | ¼ ounce  |
| Turpentine      | 3 ounces |
| Chloroform      | 1 ounce  |
| Aqua ammonia    | 3 ounces |

This furnishes an excellent embrocation. The wintergreen may be replaced with any suitable aromatic oil, such as rosemary, cedar or thyme. For a liniment that can be used externally or internally the following formula is offered:

## PAIN EXPELLER.

|                        |          |
|------------------------|----------|
| Oil sassafras          | 8 ounces |
| Oil cassia             | 1 ounce  |
| Oil cloves             | 2 ounces |
| Turpentine             | 6 ounces |
| Stronger ammonia       | 1 ounce  |
| Chloroform             | 4 ounces |
| Alcohol enough to make | 1 gallon |

## RHEUMATIC LINIMENT.

|                           |          |
|---------------------------|----------|
| Oil sassafras             | 6 ounces |
| Oil thyme                 | 1 ounce  |
| Oil cedar, pure           | 1 ounce  |
| Oil wintergreen           | 4 ounces |
| Camphor                   | 8 ounces |
| Turpentine enough to make | 1 gallon |

## Salves.

The following formulas are offered as the equal of any of the patent salves. They are easily made and very profitable.

## BALSAMIC CARBOLIC SALVE.

|                     |          |
|---------------------|----------|
| Carbolic acid       | 3 drams  |
| Oxide zinc          | 3 ounces |
| Resin               | ½ ounce  |
| Beeswax             | 1 ounce  |
| Balsam fir          | 1 ounce  |
| Camphor             | 1 ounce  |
| Lard enough to make | 1 lb.    |

Melt lard and in this dissolve the camphor; add the resin and beeswax, then the balsam and carbolic acid. Lastly sift in the oxide of zinc and stir until cool.

## EYE SALVE.

|                     |           |
|---------------------|-----------|
| Yellowoxide mercury | 8 grains  |
| C. F. oxide zinc    | 16 grains |
| Morphine sulphate   | 4 grains  |
| Petrolatum          | 1 ounce   |

Mix.

This forms an excellent eye salve.

## BLACKBERRY CORDIAL.

For a blackberry cordial the writer has nothing better to offer than the following taken from Fenner. It is an agreeable preparation and very efficient.

|                      |          |
|----------------------|----------|
| Blackberry juice     | 4 pints  |
| Catechu              | 4 ounces |
| Cinnamon             | 1 ounce  |
| Nutmegs              | 1 ounce  |
| Coriander seed       | 1 ounce  |
| Opium in powder      | ¼ ounce  |
| Sugar                | 2 lbs.   |
| Alcohol              | 2½ pints |
| Water enough to make | 1 gallon |

Grind drugs to fine powder and macerate them for a week with the juice and alcohol; then filter; add sugar and dissolve by agitation; lastly add water or simple syrup to make 1 gallon.

The writer does not recommend pharmacists to put up a full line of remedies at once, but to put up two or three and be sure they are first class and then gradually extend his line as occasion and trade demand. I have not taken space to give directions for these different formulas, as any intelligent pharmacist can get up suitable directions, which, by the way, should be explicit and very plain.

**Iodine and Tannin.**—It is well known that iodine will dissolve in solutions of tannin, but in what proportions? The *Journal de Pharmacie d'Amers*, according to the *National Druggist*, discusses the following prescription, which was presented recently for preparation:

|                   |          |
|-------------------|----------|
| Iodine            | 25 cgm.  |
| Potassium iodide  | 1 gm.    |
| Tannin            | 2 gm.    |
| Potassium bromide | 2 gm.    |
| Distilled water   | 50 gm.   |
| Glycerin          | 50 gm.   |
| Essence of mint   | 20 drops |

At first thought one would proceed to compound this prescription by pulverizing the four solids and mixing them; then mixing the water and glycerin, and dissolving therein the mixed solids. This process would appear rational, since the iodide, the bromide, and the tannin are all soluble in water, and the iodine is soluble in solutions of potassium iodide and of tannin. If manipulated in this way, however, a liquid will be obtained from which the iodine will separate completely. After experiment it was found necessary, in order to achieve success, to mingle the iodine, iodide and tannin intimately, and then to add the distilled water. Solution takes place in about two hours. When solution is completed bromide is dissolved in the liquid, the glycerin added, and, finally, the essence of mint. Without the latter the solution is of a fine, limpid, brown color, which the essential oil renders slightly turbid.

Written for the American Druggist and Pharmaceutical Record.

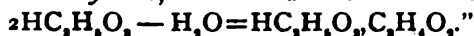
## LACTIC ANHYDRIDE, LACTIDE AND LACTONE.

By VIRGIL COBLENTZ, A.M., Ph.G., Ph.D.,  
New York College of Pharmacy.

In the DRUGGIST AND RECORD of June 22, I wish to call attention to a slight error or oversight in the article of Prof. Scoville on the titration of lactic acid, on page 384. It reads thus:

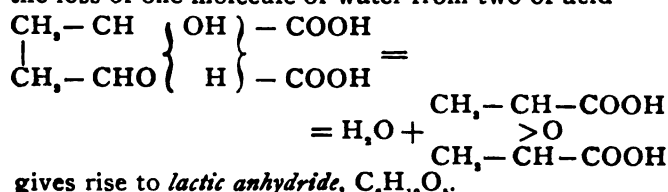
"The acid thus obtained is of a syrupy consistence and has a specific gravity of 1.21 to 1.24 and consists of a mixture of true lactic acid and *lactic anhydride*—the latter being formed by heat of evaporation, even in presence of the small amounts of water present.

"This anhydride is formed by elimination of one molecule of water from two molecules of acid, and is called *lactic anhydride*, *lactolactic acid* or a *lactone*.



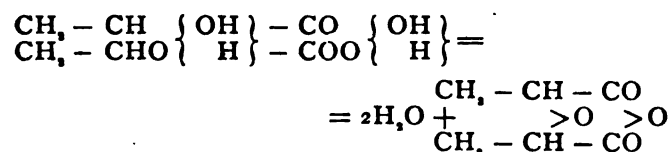
Here the author confuses the terms "lactic anhydride" and a "lactone" as being one and the same thing. This is not the fact, as will be seen:

On evaporating, distilling or even allowing lactic acid to stand over sulphuric acid some time, for purpose of removing water, either *lactic anhydride* or *lactide* or both together are formed in small quantities. Thus the loss of one molecule of water from two of acid



gives rise to *lactic anhydride*,  $\text{C}_4\text{H}_6\text{O}_4$ .

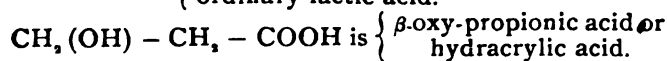
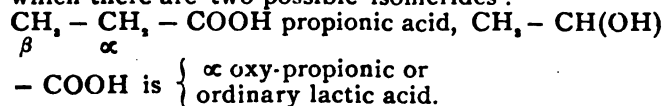
The loss of two molecules of water from two of acid



gives rise to *lactide*,  $\text{C}_4\text{H}_4\text{O}_4$ .

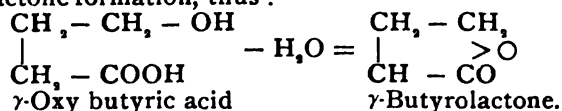
Now a word of explanation as to what is meant by the term, "a lactone." Lactones are intra-molecular anhydrides (i.e., one molecule of acid minus one molecule of water) of the oxyacids ( $\gamma$ - $\delta$ ).

Ordinary lactic acid is an  $\alpha$ -oxy-propionic acid, of which there are two possible isomerides:



From normal butyric acid three isomerides are possible, thus:  $\text{CH}_3 - \text{CH}_2 - \text{CH}_2 - \text{COOH}$ , and so on with the higher acids.

Now the  $\gamma$  and  $\delta$  oxy-acids are especially adapted to this lactone formation, thus:



Some of the  $\beta$  oxy-acids are capable of yielding corresponding lactones, but the existence of an  $\alpha$  lactone (from  $\alpha$ -oxy-acids) is very doubtful. (Ber. 15-579.)

### Professor Scoville's View on the Subject.

The above article was submitted to Prof. Scoville, with a request for his views. Prof. Scoville writes: Professor Coblentz is undoubtedly right in holding

that the term "lactone" is the proper one from a technical standpoint. I used the term anhydride in my article because of its being better understood by the general reader, and also because the term is often applied to the lactones.

Authority for this may be found in "Thorpe's Dictionary of Applied Chemistry, Vol. II., article 'lactic acid,'" the author of which I am unable to quote at this time, being away from Boston.

In regard to the formation of lactone in ordinary lactic acid, I can only say that the peculiar action of the acid in absorbing water is, to me, sufficient evidence of its presence, not to quote the article in Thorpe's Dictionary in which this ground is also taken.

Whether ordinary lactic acid belongs to the  $\alpha$  or  $\beta$  groups, or whether it is really formed from an  $\alpha$  acid, I am not prepared to state.

I desire to thank Professor Coblentz for his interest in the matter, and hope that he and others will further investigate this reaction and its true causes.

WILBUR L. SCOVILLE.

Massachusetts College of Pharmacy.

## INSECTS INJURIOUS TO DRUGS.\*

By PROFESSOR L. E. SAYRE, Ph.G.,  
University of Kansas, Lawrence.

A knowledge of entomology to the average pharmacist has always been considered of little more value than an ornamental accomplishment, having little more application than the scientific classification and naming of the few drugs derived from the insect world. To give these proper entomological names and understand in some degree their relations to other insects and the relations of the groups to which they belong to other groups has been all that was deemed necessary for the pharmacist to know of this department of scientific study.

It needs little argument to prove that a more intimate study of insects is not only useful but is almost essential to those who are supposed to discover the cause of deterioration and to be able to combat the same intelligently. This knowledge should extend to the insect forms which infest and feed upon drugs and their preparations, as the mites and dermestid beetles and forms which prey upon the drug-eating species. This, it may be said, embraces a very limited range in the eyes of the entomologist, but an acquaintanceship with this much of the science should be, for very practical purposes, well understood.

It is not my purpose in the subjoined article to treat of the science, *per se*, or to go into any lengthy detail as to the study of drug-eating insects as has been carried on in the entomological department of the University of Kansas. An article by Prof. V. L. Kellogg and myself, describing the work of last year, will be found in the proceedings of the Kansas Pharmaceutical Association for 1892. Since this time, Prof. Kellogg and Mr. S. J. Hunter have continued this study, to whom I am indebted for the material contributed upon the subject at the last meeting of this association. I shall in this article briefly glance at the various insects themselves found in various drugs and make some comments upon them for the better understanding of them.

Referring now to Plate I., I will call attention to Fig. 10. The natural size of this *mite* is found in Fig. 10a. This is the common cheese, or flour mite, familiar to most of us, found in farinaceous drugs. The order to which it belongs—the mites—are characterized by having most of the mouth parts united to form a piercing beak. They have two sharp needle-like projections

\* From the American Journal of Pharmacy.

which correspond to the jaws or mandibles of other insects. These stylets or lancets are very useful when the mite needs to pierce some protecting envelope to get at succulent inner matter, or when the mite has to live on "dry food." This mite species lives on raw sugar, in which it appears as small white specks. At least a half dozen species of mites attack cantharides, which, we know, are insects belonging to the great beetle order. Besides the mites, several species of small animal eating beetles do great havoc in the jars of cantharides. The beetles of the dermestid family, to which belongs the well-known buffalo bug, or moth of the household, feed almost exclusively on the dried remains of animals; at least this is their food when in the young or grub state. Right here it may be well to interpose a few remarks upon certain peculiarities in the life history of insects, the knowledge of which is essential to the intelligent comprehension of the subject in hand.

While in certain groups of insects the young when hatched from the egg (and insects are hatched from eggs, almost without exception) resemble the parents, the adults, yet, in other groups or orders, as the beetles, the two-winged flies, the butterflies and moths, and the ants, bees and wasps, the young appear in wholly different form from that which they will assume when full grown. For example, in the beetles, you remember, we had come to the consideration of certain cantharide-eating beetles, the first stage after leaving the egg is that of a grub or worm, so called. This worm like stage is called the *larval* stage, and the insect itself a *larva*. In the case of the dermestid beetles, of which several kinds infest the cantharides, the larva is a peculiarly hairy grub, well shown in the accompanying plate. The dermestid beetle here illustrated in its various stages of growth is the buffalo bug, and in Fig. 4 is the "fish"-shaped larva with its hairy body, next the mummy-like pupa (Fig. 3), with its legs and feelers closely folded against its body. This is the second stage in the life of the

beetle. After the larva has become full grown it seeks a sheltered spot, ceases feeding, and becomes transformed into an almost immovable mummy-like object, called the pupa. It remains thus quiet and without eating for a few weeks (in most cases), and then emerges, the perfect beetle Fig. 2.

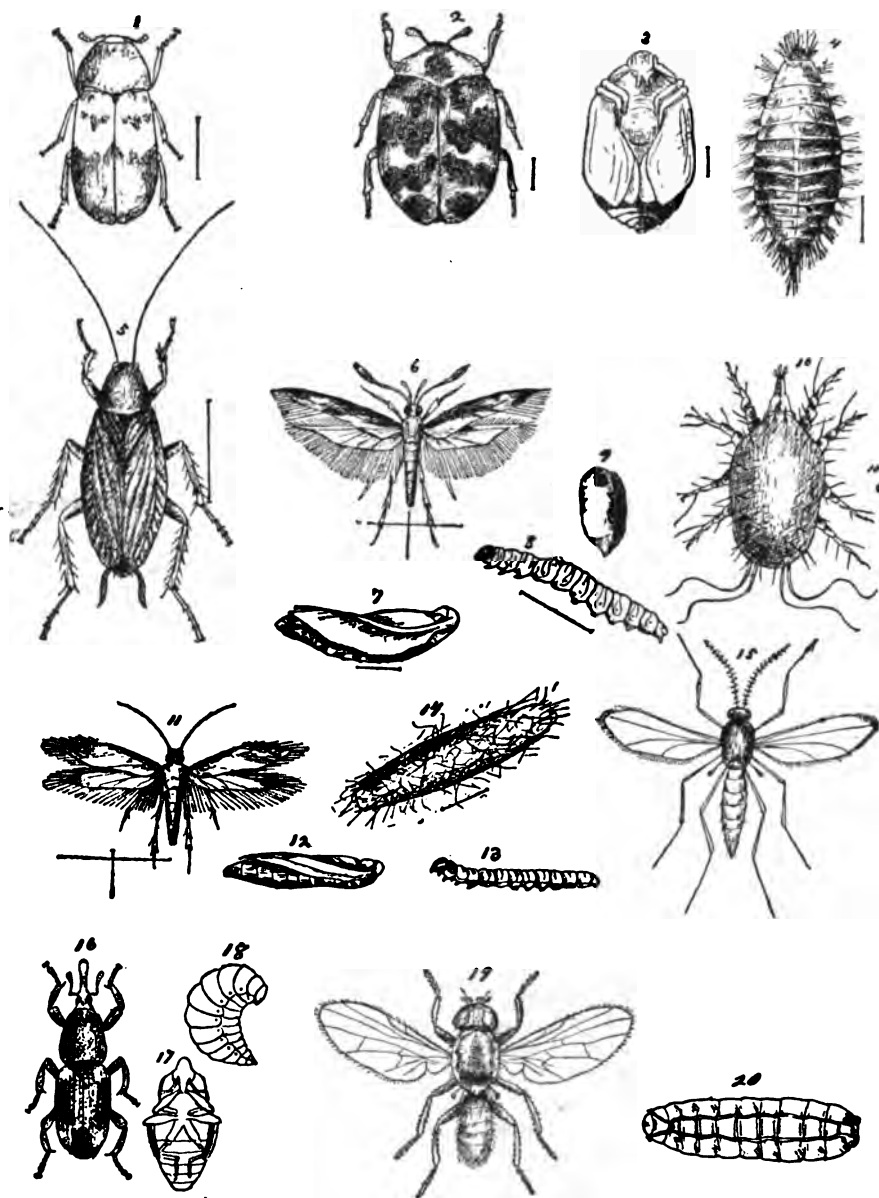
There are other species of beetle which attack the pharmacist's stores; for example, *Ptinus brunneus* (we are sorry to be compelled to use these scientific names, but very few insects have common names), a small brown, slender legged beetle, which feigns death when disturbed, does great havoc in the larval stage, in jars

of allspice, capicum and cinnamon. *Anobium paniceum*, one of the so-called "death ticks," and much like the *Ptinus*, attacks agaric and several other drugs. *Lasioderma serricorne*, closely related to the *Anobium* and *Ptinus* (all belonging to the family *Ptinidae*), eats, as larva, capicum and dried tobacco. *Bostrichus dactyliperda*, another member of the same family, attacks sweet almonds. Two species of *Deutorhynchus*, small, snouted beetles or weevils, infest poppy and other seeds. Another weevil, *Dalmanella oryza* (Figs. 16, 17, 18), imported from Europe, infests rice and ground roasted acorns. A near relative is the notorious grain weevil, which does great damage to stored cereals.

Leaving the beetles now, the next group of insects important to the pharmacist is that of the

moths and butterflies. While we should hardly expect to find moths and butterflies with their long nectar-sucking tubes for mouths, injuring our stores, we do find that these same insects in their young or larval stage, when they are familiar to all as "caterpillars," do not a little injury to our drugs.

The moths, like beetles, go through a strange metamorphosis, and while in the caterpillar stage are provided with strong jaws for eating dry food. All know of the clothes-moth, dread foe of the housewife, which, as a small white caterpillar, living in a cylindrical roll



INSECTS INJURIOUS TO DRUGS.

or case made from the woolen cloth or fur it is feeding on, does irreparable injury to the choicest fabrics and costliest furs. This moth belongs to the genus *Tinea*, of which one or more species attack drugs. Figs. 11, 12, 13, 14 illustrate the life history of the moth of this genus. Fig. 13 is the larva or caterpillar, Fig. 14 the case or roll in which it lives; Fig. 12 is the pupa or resting stage, and Fig. 11 is the adult moth. The moth is very small and light brown in color. Another moth, known as the Angoumois grain moth (it does great havoc to stored grain in the province of Angoumois, France; hence the name), attacks in the caterpillar stage all kinds of stored grain. It bores holes into the grain kernels and eats out the starchy interior, leaving only a delusive hollow shell. The illustrations Figs. 6, 7, 8, 9 show its various stages and the appearance of the infested grain kernels. The larva of *Carpocapsa amflana*, a moth of the same genus as the codlin moth, the greatest insect pest of the apple, infests the seeds of *Corylus avellana*, *Fuglans regia* and *Castanea vesca*. The larva of *Myelois cerasonia* feasts on the fruits of *Cerantonia siliqua* and *Castanea vesca*. The larva of the moth *Oecophaga olivella* inhabits the kernels of the olive, causing the dropping of the fruit and a smaller yield of oil.

Passing now to another order of insects, the two-winged flies, we find that while the mouth parts of the adult flies are adapted for sucking or lapping, the young flies, which appear as grubs or maggots, are better prepared to partake of solid food. The olive in southern France and Italy is infested by a larva of a fly known as *Dacus olea*; in the kernels of fresh hazel nuts are often found the larvæ of a fly which belongs to the same genus as that notorious wheat pest, the Hessian fly (see Fig. 15). The fly *Trypeta arnicivora* (see Figs. 19 and 20, illustrating a nearly allied species, *pomonella*) is often gathered in its youthful state with arnica flowers and becomes developed later on, after feeding on the flowers in the pharmacist's canisters.

About two months ago, I placed a notice in the leading pharmaceutical journals of the United States, in which I asked that any insects found destroying drugs should be sent to me in order that they might be studied. As a result, several packages of drugs damaged by insects have been received from different parts of the country, giving an excellent opportunity to pursue the study further. As a result of this latter work I will refer to Plate II.

From P. R. Brooks, of Miles Grove, Pa., was received pressed packages of peppermint, marshmallow leaves, skull cap, wormwood and thorn apple. All of these drugs were infested by a small brown beetle 5 to 7 mm. in length, 2 mm. in width, with longitudinal rows of punctures on wing covers, body above and below covered with fine hairs. This insect is known as *Nicobium hirtum* (see Figs. 4 and 9 for adult and larva). When the insect is disturbed, it feigns death, but soon resumes activity and seeks a hiding place. This insect, as far as we have been able to observe, is one of the worst of insect drug pests. A small box of pulverized capsicum from D. S. Morgan, Jersey City, also one from J. M. Foy, Worcester, Mass., contained both the adult and larvæ of this brown beetle. Upon examining some drugs in stock in the University's Department of Pharmacy, we found this insect in some roots of a bitter character; also, in orris root and ginger root. It is not improbable that this insect may be found attacking any drug containing starch. From Michigan (name of firm and place of residence not given) a package of caraway was received containing the larvæ of some beetles. This larva measures about 7 mm. in length, is white, with pale brown head and body partly covered with short brown hairs (see Fig. 7).

From C. L. Becker & Co., Ottawa, Kan., three packages of drugs injured by insects were received. One of them was a small package of foenugreek, in which was an insect very closely allied to one familiar to housewives of Eastern States, the notorious "buffalo bug" Fig. 1, 2 and 3 show the adult, pupa and larva states, respectively, of this drug pest. It is *Anthrenus varius*.

Its color is black and white; sometimes the white is tinged with reddish yellow. The adult insect lives chiefly on the pollen of certain plants, such as the different varieties of spiræa and those of the shad-bush, *Amelanchier canadensis*. Indoors not it only attacks carpets, rugs and woolen goods, but also collections of natural history, furs, hair and drugs. The larva is more destructive than the adult insect.

The second was a small box of Indian turnip. The drug came all right, but the insects had cut a hole through the side of the box and escaped. The third lot was a package of condition powders containing the brown insect, *Nicobium hirtum* just described.

A box pulverized marshmallow was sent from Philadelphia. In it were a number of small brown beetles. They were 11 mm. long and 2 mm. wide. The long, white larvæ was in the same box, and these are shown in Figs. 10 and 11.

M. Noll, Atchison, Kan., sent an extract of licorice infested with some small white beetle larvæ which is shown in Fig. 6. From the same firm came a box of almond meal in which were a lot of dark brown beetles *Sitonaus surinamensis*. This beetle is shown in Fig. 5, and is easily recognized by the serrated edges of the portion between the head and wings. Its long, narrow body and antennæ enlarged at the tips. Figs. 12 and 14 represented two phases in the life of a moth of the genus *Tinea*, frequently found flying about among drugs. Fig. 13 shows a little white mite, highly magnified, and seen as small specks on cantharides kept in stock.

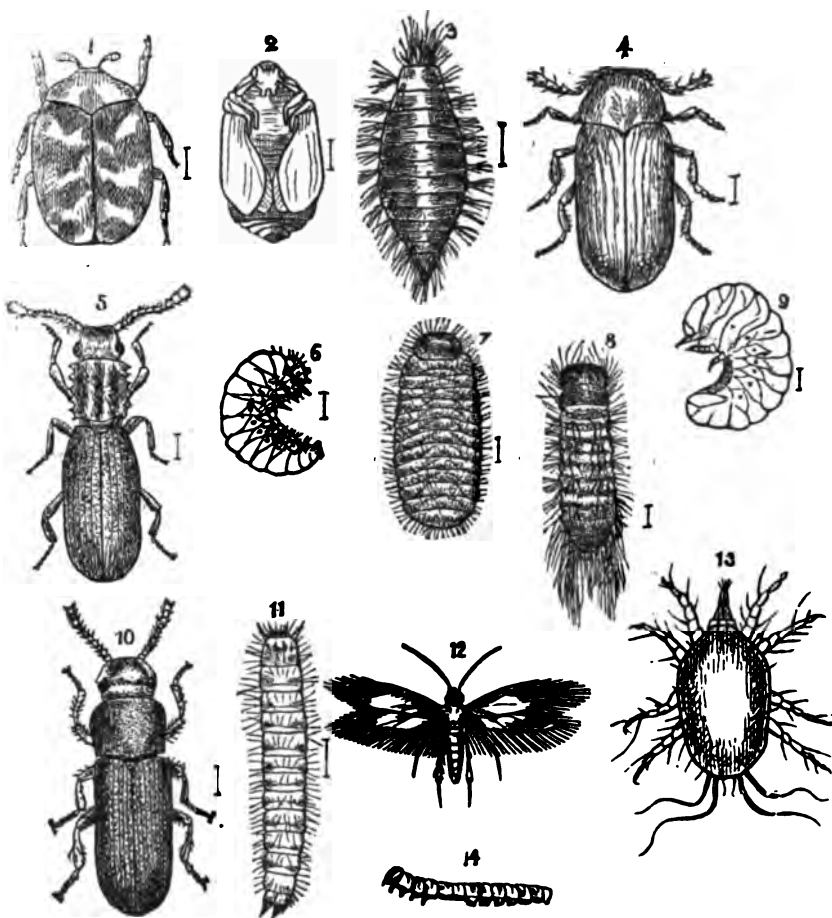
So far, only insects attacking drugs proper have been mentioned, but in our investigations we have met some insects that destroy articles not properly called drugs, but always kept in drug stores. For instance the larva represented in Fig. 8 is that of a beetle which lays its eggs on bone combs. The grub, on hatching, bores its way back and forth through the substance of the comb until the comb is made absolutely worthless. Another beetle attacks horn combs, either breaking off the tips of the comb points or cutting through the side.

Our observations so far have shown: First, that the most destructive insects are the beetles or sheathed-winged insects. With the exception of one moth and one mite, all the insects received at the University and mentioned in this article, are beetles. Second, that the greater part of the drugs attacked and destroyed are vegetables or vegetable products, and hence, that these need the greatest care and watchfulness. Third, that there is need of greater vigilance and more observation on the part of druggists, if these pests are to be successfully driven out. One druggist, when asked if he had ever noticed anything destroying combs, said he had never heard of such a thing; but upon investigating his own stock he found out of a small lot two combs that were destroyed. Yet he could hardly believe that insects are capable of such work.

I shall have nothing to say in this article as to the means of prevention and the use of repellents such as have been frequently suggested in current pharmaceutical literature. It is my desire to enter this field of investigation, and anything that the druggists of the United States can do to aid in the matter will be appreciated. Attention must be given to the life

history of some of these insects. We should know what materials the insects breed in, what time they deposit their eggs, and make all the observations possible. From these notes a systematic study of the pest can be made, and results of practical value can be obtained. The Swedes, in the time of Linnæus, alarmed at the way in which their ship timber was being destroyed by a certain larva, applied to the noted naturalist for aid. He told them, that if they would sink their ship timber in the sea during the month of May, they would be bothered no further by this larva, for the beetle, which is the parent of the grub, deposits its eggs in the timber in the month of May, and at no other time of the year. If we had a more comprehensive knowledge concerning the habits and life history of insects injurious to drugs, it is very probable that easy means of preservation and prevention of insect destruction might be used.

**"Reducin,"** a New Photographic Developer, is highly spoken of by Dr. H. W. Vogel (*Anthony's Photogr. Bull.*, 1893, No. 12), who reports as follows: 3 grammes [45 grains] were dissolved in 500 gms. [16¾ fl.oz.] of water. The solution assumed a peculiar green color and the reducin dissolved rapidly. 9 drops of sulphuric acid and 25 grammes [6¼ drs.] of sodium sulphite were then added, the solution becoming purely yellow. 2 plates were simultaneously exposed for 10 seconds; the one was developed with sodium and pyrogallie acid, the other with reducin, 4 drops of solution of potassium bromide (1:10) being added to each developer. The picture appeared with lightning-like rapidity with the new developer, while it took about 30 seconds with the pyro developer, reducin thus proving to be a considerably quicker developer than pyrogallie acid. Dr. Vogel exposed two other plates, one 5 and the other 10 seconds, developed the latter with pyro and 4 drops of a solution of potassium bromide (1:10) to 45 of developer, the other with reducin "B" solution and 6 drops of potassium bromide solution. The picture came up again very quickly in the reducin solution, in spite of the short exposure and the increased quantity of potassium bromide; while the picture of double the exposure required with pyro about 6 times as long to appear. The author advises to use reducin in smaller quantity, viz.: 1-25 grammes [¼-6½ drs.], besides 25 gms. [6 drs.] of sodium sulphite and 9 drops of sulphuric acid in about 500 c.c. [17 fl. oz.] of water.



INSECTS INJURIOUS TO DRUGS.

**Detection of Cotton-seed Oil in Lard.**—F. Gantter states (*Zeitsch. f. anal. Chem.*) that he has met with several samples of cotton-seed oil which failed to give a silver reaction, and also a number of samples of lard strongly suspected of adulteration with cotton oil which gave no indications by Becchi's test. He concludes that some treatment of the oil is now adopted with a view to circumvent analyses. He has modified the sulphuric acid test which depends upon the dark colorations produced with cotton oil but not with lard, and has in this respect followed Flückiger (*Zeitsch. f. anal. Chem.*, vol. x., p. 235), who recommended dilution of the oil to be tested with ether, benzol, chloroform or carbon bisulphide, in order to moderate the action of the sulphuric acid. He takes 1 c.c. of the oil or fat to be tested, adds 10 c.c. of petroleum ether,

and a single drop of strong sulphuric acid, shaking violently at once. Pure lard becomes straw colored, or faint reddish yellow; after some time the solution becomes clear and colorless, or nearly so, while dark red droplets separate. Cotton-oil at once becomes dark brown or black, and the solution remains so for a very long time. Mixtures take on a more or less dark-brown shade; even 1 per cent. of cotton-oil mixed with lard showing the reaction plainly. Olive oil behaves in a similar manner to lard, but earth-nut oil resembles cotton oil. The author also gives a number of iodine figures for pure and mixed lard, which differ considerably from those found by others. He is of opinion that pure lard should not absorb above 27

per cent. of iodine. It is noted by the *Analyst* that the coloration produced by sulphuric acid is almost entirely dependent upon the quantity of sulphuric acid added. A sample of lard dissolved in petroleum ether as directed by the author remained uncolored by a single small drop of sulphuric acid, with a large drop became yellowish, and brown with two drops. The same changes were observed with a number of other samples. It appears to the abstractor that neither the method nor the iodine figures given by the author are trustworthy.

**Preservative Fluid**—A patent has been issued by the German government for a fluid to replace that of Wickersheimer consisting of 600 grammes of hyposulphite of soda, 75 grammes of chloride of ammonium, 5,250 grammes of water, and from 4 to 6 liters of alcohol.

# Pharmaceutical Progress

**Izal** is a new proprietary English disinfectant, probably of the same class as sapocarbolic, cresol, lysol, etc. According to the *Chemist and Druggist*, however, it contains no phenol.

**Russian Cholera Drops.**—*B.* Tinct. opii camph., 6 parts; vini ipecac, 4 parts; tinct. valerian ether, 12 parts; ol. menth. pip., 1 part. *M. Sig.* "Russian cholera drops"; 15 to 25 drops in peppermint tea, every half hour.

**Thioform** is the name given to the basic bismuth salt of dithiosalicylic acid. Prof. L. Hoffmeister (*Repert. für Theilheilkunde*) recommends it as being a powerful antiseptic, and since it is non-toxic it can be used more freely than iodoform or other antiseptics.

**Somatose.**—Recently Bayer & Co., of Elberfeld, have introduced a preparation containing (*Pharm. Centralh.*, 1893, No. 17) as much as 84–86 per cent. of albumoses, with but a minute proportion of absolute peptone, and entirely devoid of the unpleasant, bitter taste and the disagreeable odor of pure peptone.

**Phytoline.** An American antiflat, says the *Pharmaceutische Zeitung*, is quite likely the phytolaccin of Clausen. This is obtained by extracting the acidified alcoholic extract with ether. This substance, phytolaccin, is crystalline, slightly soluble in water, readily soluble in chloroform, with sulphuric and nitric acids turns light yellow, and later dark yellow.

**Black Ironwork Varnish.**—Asphaltum, 48 lbs.; fuse; add boiled oil, ten gallons; red lead and litharge, of each 7 lbs.; dried and powdered copperas, 3 lbs.; boil for two hours; then add dark gum amber (fused), 8 lbs.; hot linseed oil, two gallons; boil for two hours longer, or till a little of the mass, when cooled, may be rolled into pills; then withdraw the heat, and afterwards thin down with oil of turpentine, thirty gallons. Used for the ironwork of carriages and other nice purposes.

**The Active Principle of Male Fern.**—According to Professor Kobert, the active principle of the male fern is not only folic acid, but also the essential oil, which forms a kind of loose compound with the fatty acid. This mixture, or compound, is easily emulsified in the intestine, and exercises a stupefying action upon the tape worm, which is then expelled by a laxative. The ethereal extract of male fern should be prepared from the rhizomes gathered in the Autumn, for the Spring collection is less certain in its action.—*Pharm. Zeitschrift*.

**Bismuth Sulphate** has been studied by Dr. W. Kinzel, who states (*Pharm. Zeit*) that the neutral sulphate in needle-shaped crystals is obtained by evaporation of a solution of bismuth oxide in 30 to 40 per cent. sulphuric acid. On standing some time hexagonal tables also separate out in conjunction with the needle-shaped crystals. Dr. Kinzel believes that these latter tabular crystals are the real neutral sulphate, but was unable to obtain them free from the needle shaped crystals. The fine acicular crystals he

finds not to be a neutral, but a one-third basic salt of the formula:  $\text{Bi}_2(\text{OH})(\text{SO}_4)_3$ .

**Erigeron Canadense.**—A modern writer says that the oil of erigeron is efficient in various kinds of hemorrhage, especially when of a passive character. The dried flowering herb is recommended as a good local styptic for bleeding of the skin, especially from cuts after shaving. Professor Flagg gives two drops of a tincture made by absolute alcohol two or three times a day as an antihemorrhagic. One or two drops of the same tincture in half a teaspoonful of water is given for acute hemorrhage every minute or every half-hour, or as indicated.

**Steresol, a New Antiseptic Varnish,** is said by Dr. Berlioz (*La France Méd.*, 1893; No. 23) to adhere perfectly to the mucous membranes and the skin, the phenol (which is its active ingredient) not evaporating completely from the layer of varnish until after 24 hours. Its application is not painful, nor does it cause eschars, it is reported; and is said to have been remarkably beneficial in ulcerations. It permits of permanent asepsis of mucous membranes and of parts of the body where it is impossible or difficult to keep on bandages. Its composition is as follows:

|  |                    |                        |
|--|--------------------|------------------------|
| Gum-lac, purified, entirely soluble in alcohol | 270 grammes        | [9 ounces]             |
| Benzoin  | 10 "               | [2½ drams]             |
| Tolu balsam                                    | 10 "               | [2½ "                  |
| Carbolic acid, crystallized                    | 100 "              | [3½ ounces]            |
| Cinnamon oil                                   | 6 "                | [1½ fl. drs.]          |
| Saccharin                                      | 6 "                | [1½ drams]             |
| Alcohol  | sufficient to make | 1 liter [33.8 fl. oz.] |

—M. M. R. & P. J.

**A Point in the Analysis of Soap.**—It is pointed out by E. Dietrich in a recent contribution to the study of soap, that a partial dissociation takes place of the alkali salts in soap during the salting-out process, and that by repeating the operation several times the amount of free fatty acid in the sample is unduly raised. This occurs, he states, whether the salting-out be performed in hot or in dilute solutions. For these reasons he has abandoned the salting-out process in his own work when estimating the total alkali in soap, and has adopted in its place the following modification of the well-known process of Geissler:—One gramme of the sample soap is dissolved in thirty cubic centimetres of 96 per cent. alcohol, and five cubic centimetres of decinormal sulphuric acid is added, the mixtures being then boiled until carbonic acid gas ceases to be evolved. The cooled solution is then titrated with decinormal alkali, using phenolphthaleïn as the indicator.

**Military Service in France.**—Under the terms of the present law in military service students in pharmacy have the faculty of serving for one year only (as against three), on the condition of having the degree of Pharmacist of the First Class before the age of twenty-six. During this period they serve in the infantry. They can either engage for service at the age of eighteen, or wait for a year or two later until they are called up, but in either case the year passed under

the flag is entirely lost in regard to their scientific training. A proposition has now been brought forward by Professor Cornil with a view of securing their incorporation in the medical service, in which they would ultimately have to serve in time of war. The existing state of things has been brought about by the republican idea that every Frenchman who has arrived at maturity should have learned the profession of a soldier, which, however, is of little use if his only business in a battle will be to look after the sick and wounded.

**Syrup of Tea.**—The following method of preparation of this mixture is given: One part of black tea is heated to boiling with five parts of water, and then allowed to macerate for some hours at the ordinary temperature. It is then filtered, and three parts of sugar added, and the whole heated until it is dissolved. This is filtered again, and forms a bright brownish syrup.—*Pharm. Zeitung.*

**Detection of Monovalent Alcohols.**—The usual methods, such as that depending upon the iodoform reaction, for detecting alcohol, are not satisfactory, since they do not apply to alcohol only, but also to other analogous substances. The following reaction, described by Bitto (*Chem. Zeit.*), although not particularly delicate, is claimed by the author to be definitely characteristic of monovalent alcohols. 0.5 grm. of methyl violet is dissolved in a liter of water, and 1 to 2 c.c. of this solution, together with 0.5 to 1 c.c. of a solution of an alkaline polysulphide, is added to the liquid to be tested. If a monovalent alcohol be present, the liquid remains clear, but becomes cherry or violet red. It must be noted that a fair amount of the liquid to be tested should be taken, and that the coloration alters on standing. In the absence of a monovalent alcohol the liquid becomes greenish-blue, and after a time deposits reddish-violet flocks, the liquid itself, at the same time, becoming yellow. The reaction appears to take place with substances containing the group C(OH). The behavior of the following bodies has been tried:

| Substance.                  | Coloration. |
|-----------------------------|-------------|
| Methyl alcohol.....         | Cherry red  |
| Ethyl alcohol.....          | Cherry red  |
| Normal propyl alcohol.....  | Cherry red  |
| Iso-propyl alcohol.....     | Cherry red  |
| Tertiary butyl alcohol..... | Violet red  |
| Iso-butyl alcohol.....      | Violet red  |
| Iso-butyl carbinol.....     | Violet red  |
| Allyl alcohol.....          | Violet red  |

Divalent and trivalent alcohols, carbohydrates, acids, aromatic compounds, phenols, etc., do not give the reaction.—*The Analyst.*

### Specific Gravity of Oils.

The specific gravity of oils is an interesting subject and the following list, arranged alphabetically, includes all the common oils of commerce:

Cocoonut oil is solid at 59°–60° F.; its specific gravity at 210° F. equals 867–874.

| Oils.                            | Specific gravity, 59–60° F. | Oils.                 | Specific gravity, 59–60° F. |
|----------------------------------|-----------------------------|-----------------------|-----------------------------|
| Almond.....                      | 914–920                     | Linseed.....          | 930–937                     |
| Apricot.....                     | 919–920                     | Lard.....             | 914–915                     |
| Behen.....                       | 918–917                     | Mustard.....          | 914–920                     |
| Boiled linseed.....              | 940–950                     | Neatsfoot.....        | 914–916                     |
| Bone.....                        | 915–916                     | Olive.....            | 914–917                     |
| Cassia.....                      | 945–948                     | Peach.....            | 930–928                     |
| Cottonseed.....                  | 921–920                     | Palm.....             | 920–926                     |
| Camelina (gold of pleasure)..... | 921–926                     | Rapeseed (colza)..... | 914–916                     |
| Cress seed.....                  | 928–921                     | Sesame.....           | 920–924                     |
| Castor.....                      | 960–970                     | Sunflower.....        | 924–920                     |
| Croton.....                      | 940–953                     | Seal.....             | 924–920                     |
| Cod liver.....                   | 925–936                     | Sperm.....            | 915–984                     |
| Colza.....                       | 914–916                     | Tea.....              | 916–917                     |
| Colophin.....                    | 921–928                     | Tallow.....           | 914–916                     |
| Drapeseed.....                   | 919–921                     | Walnut.....           | 925–928                     |
| Hempseed.....                    | 925–930                     | Whale.....            | 920–930                     |

### SELECTED FORMULAS.

#### FOR PSORIASIS OF THE SCALP.

(DR. BULKLEY.)

|                        |        |
|------------------------|--------|
| Hydrarg. ammoniat..... | ℥ 3 ss |
| Bismuth subnitrat..... | ℥ 3 ss |
| Acid. carbol.....      | gtt x  |
| Unguent aque rose..... | ℥ 3 i  |

#### PAPAIN ELIXIR.

(Chemist and Druggist.)

|  |      |
|--|------|
| Papain.....                                | 11.0 |
| Glycerin.....                              | 60.0 |
| Sherry wine.....                           | 15.0 |
| Saccharin.....                             | C.4  |
| Chloroform water, add to make 300 grammes. |      |

Keep for a week, shaking frequently, and then filter. A teaspoonful of this pleasant and palatable digestive aid and tonic will contain about 2 grains papain; this is sufficient for general use, and a half-tablespoonful will suffice in advanced cases of indigestion.

#### HYPERDROSIS OF THE FEET.

(KAPORI.—*Sem. Med.*)

|               |         |
|---------------|---------|
| Naphthol..... | gr. xxi |
| Glycerin..... | gr. xiv |
| Alcohol.....  | ℥ 3 i   |

Apply night and morning; then dust.

Or the following:

|                     |       |
|---------------------|-------|
| Pulv. naphthol..... | gr. v |
| Pulv. amyli.....    | ℥ 3 i |

Every morning.

#### FOR TAPEWORM.

(DR. DUHOURCAU.)

|                           |         |
|---------------------------|---------|
| Extract of male fern..... | 1.20 gm |
| Chloroform.....           | 3.60 gm |
| Castor oil.....           | 3.60 gm |
| Croton oil.....           | gtt. ss |

To be divided into twelve doses.

#### WASH FOR ECZEMA.

|                     |             |
|---------------------|-------------|
| Benzoin.....        | 3 per cent  |
| Soap in powder..... | 97 per cent |

#### FRECKLE LOTION.

|                         |          |
|-------------------------|----------|
| Mercury bichloride..... | 0.50 gm  |
| Camphor.....            | 0.60 gm  |
| Alcohol.....            | 7 c. c   |
| Subacetate of lead..... | 2.5 c. c |
| Sulphate of zinc.....   | 2.50 gm  |
| Distilled water.....    | 250 c. c |
| Yellow of an egg.....   |          |

Wet the face and let it dry on.

**The Preparation of Haschish.**—Assistant-Surgeon Asutosh Ghose, writing, in the *Indian Agriculturist* on majoom or haschish, thus describes its preparation: *Majoom* is prepared from the leaves, tops, and tender parts of the plant called *Cannabis Indica* or *Sativa*. Four ounces of such parts of the plant are taken, free from unripe fruit, flowers, or other impurities. They are thoroughly washed, and 3 oz. of pure butter added to the leaves, with about 4 oz. of water. All these ingredients are put together in an earthen pot over a slow fire. The water is allowed to evaporate, leaving in the pot the buttered leaves, which are now strained through a piece of muslin. The strained greenish extract is removed with great care, the other impurities on the muslin being thrown away. The extract is then washed with pure water twice. In another pot about 16 ounces of sugar, with 2 ounces of water, and a little milk, are boiled. By repeated boiling and mixing of milk a syrup is prepared. In this syrup, the greenish oily extract is put, and boiled on a slow fire. Now is the time to mystify the preparation. Some add *datura* seeds; others *nux vomica* seeds in finest powder. But the usual practice in Bengal is to add a few drops of otto of roses, or a few grains of musk, powdered cardamom seeds, and sometimes a minute quantity of opium. After boiling half-an-hour, the whole mass is

poured into a flat basin. It solidifies, and is cut into cakes. Sometimes the best *hashish* is sold at sixteen rupees a seer, but usually the price is four rupees. *Hashish* is the Arabic *hashish*, which means "green, intoxicating liquor," probably derived from the Hebrew *shesh*, which means "to be joyous."

**Ichthyol**, according to Dr. Damiens, has properties similar to cocaine, when used hypodermatically and is reported to be very useful in *neuralgia*.

**Hectograph Mass.**—F. M. Horn states (*Pharm. Post*), that he has examined an excellent hectograph-mass. He first dissolved the mass in water, precipitated the gelatine with alcohol, estimated the glycerin by the acetin method, and took water by difference. The percentage composition turned out to be glycerin 70.5 per cent., gelatine 8.5 per cent., and water 21 per cent. These proportions were found to be excellently adapted here for the purpose, but say 20 of water by preference.

### Electro-plating Processes.

For many years it has been recognized among galvanoplaters that the processes for electro-plating with brass were faulty, that they failed to give satisfactory results, giving irregular deposits and an ugly, dirty color, etc., and a great deal of time and money has been wasted in attempts to correct these deficiencies. The concern of Wm. Pfanhauser, in Vienna, has been especially active in this direction, and have finally adopted the following formula as that giving the best results:

|   |          |
|---|----------|
| Cyanide of copper and potassium.....          | 40 gm.   |
| Cyanide of zinc and potassium.....            | 40 gm.   |
| Cyanide of potassium, c. p.....               | 2 gm.    |
| Ammonium chloride, crystal.....               | 2 gm.    |
| Carbonate of sodium (by ammonia process)..... | 10 gm.   |
| Water.....                                    | 1 liter. |

Heat to lukewarmness, and stir until solution is effected.

The preparation of this solution is very simple, quite within the capacity of any layman. The solution is ready for use at once, and does not need to be boiled, redissolved, etc., as is the case in all formulas hitherto published.

The bath should be kept at a temperature of at least 20 to 25° C. For electro plating the various metals the following current will be needed:

|           |         |
|-----------|---------|
| Zinc..... | 2 volts |
| Iron..... | 3 volts |

Chains will need from 3 to 3½ volts, and smaller articles, hung together in mass, 4 volts.

From the composition of this bath it will be noted that the metallic contents are very high, 40 gm. of the double cyanide of copper and potassium, equaling 12 gm. of copper and 40 gm. of zinc and sodium cyanide, equaling 10 gm. of zinc, which gives the liter of solution 22 gm. of brass. The highest amount attainable under the old formulæ was from 7 to 10 gm. to the liter.

The deposit of brass is made from this solution equally even and good, on all metals, while the color is always a bright, fiery yellow. Even cast iron, upon which it has hitherto been deemed almost impossible to deposit a coating of brass, takes the metal as well as the finest steel or zinc.

If the anodes begin to be covered with a green incrustation which does not disappear over night (when the bath is not in operation), it is an evidence that the liquid is in need of additional potassium cyanide.

A gram to the liter will correct the disturbance of function. If, through too much current, the bath becomes poor in metallic contents, add the double cyanides of copper and potassium and zinc and potassium in equal quantity. The practical workman easily recognizes this condition as the work progresses.

### TO PLATE WITH COPPER.

The deposition of copper alone on other metals is nothing like so difficult a matter as plating with brass. In fact, it is a very simple and easy matter. While this is true, he who would avoid blistering, etc., in the process should use the following bath:

|                                 |         |
|---------------------------------|---------|
| Potassium-copper cyanide.....   | 80 gm.  |
| Potassium cyanide.....          | 2 gm.   |
| Ammonium chloride, crystal..... | 2 gm.   |
| Sodium carbonate.....           | 10 gm.  |
| Water.....                      | 1 liter |

Dissolve as before with a very gentle heat (not more than lukewarm.)

The bath should be kept at not lower than 65 or 70° F. Current 3 volts. The rules regulating the strength of the bath, etc., are the same as in plating with brass.

### PLATING WITH TIN.

The Roseleur bath, formerly in general use, has the drawback of being very poor in metal, although otherwise it produces excellent results. Pfanhauser's formula corrects this defect. It is as follows:

|                              |         |
|------------------------------|---------|
| Tin chloride, melted.....    | 40 gm.  |
| Caustic soda.....            | 50 gm.  |
| Potassium cyanide, pure..... | 10 gm.  |
| Water.....                   | 1 liter |

In this bath there are 27.32 gm. of metallic tin to the liter, and with a current of 3½ volts 31 cg. of tin is deposited per hour, which is surely a satisfactory showing.

Very recently Pfanhauser has found that even better results, however, are attained with a solution in which the tin chloride is replaced by an equal amount of tin-ammonium chloride. From this bath more than double the given amount of tin is deposited hourly, viz.: 723 milligrams. The solution is very cheap and easily prepared. Cast tin anodes are the best to use. Two Bunsen elements, connected for tension, furnish sufficient electrical energy for this work. The tin deposit is rough, but is easily made white and smooth by scratch brushes.—*Der Electrotechniker* through *National Druggist*.

### Solutions.\*

BY ERNEST J. PARRY, B.Sc.

One of the problems which has given rise to more discussion than almost any other, of late years, in chemical theories is the nature of substances when dissolved in water. Formerly we were content to accept as self evident, that if we dissolved a salt in water, it simply became liquid, and that nothing particular had happened. But it appears that such an apparently simple phenomenon is far more complicated than had hitherto been supposed; and to explain what really did happen, or what is believed by many to happen, required the aid of not merely the chemist, but of the physicist, and largely, too, of the mathematician. The full understanding of the theory, which is held by a very large school of chemists, on the phenomena of solution, and of many more fundamental principles of chemical science, demands what so many—the great majority, in fact—of our English chemists lack—a mathematical training; not the knowledge of the mathematical work which one is compelled to have to obtain, for example, a degree in science, but a real working knowledge of the highest branches, of the calculus, and of high co-

\*From the *British and Colonial Druggist*.

ordinate geometry; without these it becomes almost an impossibility to solve the deeper problems of physical chemistry. Hence the fact that physical chemistry is to all intents and purposes a German science. In 1887 Arrhenius enunciated a theory—new in most of its points—which, although it conflicts with many of the generally adopted views (adopted, however, as self-evident, not because of any proof of their truth) certainly agrees with a large number of observed facts otherwise almost inexplicable. The gist of his theory is that substances which are decomposed by the electric current—that is electrolytes—do not exist as such when in solution, but are dissociated to a greater or less extent, depending on the concentration of the solution. For example, a solution of potassium chloride of a certain concentration contains, according to him, no KCl, but free potassium and free chlorine. It was a commonly accepted hypothesis that the electric current on entering a solution of an electrolyte decomposed the salt into its "ions." But evidently it is necessary for some work to be done to effect this, which is not accounted for by experiment. So that it seems improbable that the current can actually decompose the salt. Clausius therefore assumed that collision of the dissolved molecules *inter se* decomposed some of them. Arrhenius was the first to attempt to put forward any definite theory on the matter as affecting the general question of solution. Before discussing several pieces of important evidence to support his ideas, it will be necessary to understand some recent work of other chemists on the determining of molecular weights from data yielded by solutions. If a substance be dissolved in a given solvent whose solidifying point is known, this solidifying point is lowered by an amount varying directly as the amount of substance dissolved, and inversely as the amount of solvent and the molecular weight of the dissolved compound. This gives us a method of determining the molecular weight of a compound; it can be found from the equation  $M = \frac{R}{P}$

—where  $M$  is the molecular weight,  $R$  a constant found by experiment for each solvent,  $G$  is the weight of the solvent, and  $D$  the observed depression in the freezing point. Now if indifferent substances, such as sugar, etc., be used experimentally in these determinations, we find the law holds good. Whereas if we use salts, strong acids or bases, we find certain abnormalities. The depression in these cases of the freezing point is always greater than would be expected when calculating on the known molecular weight of the salt. In the case of potassium chloride, it is, in moderately strong solutions, nearly twice as much, and as the solution becomes weaker, it becomes almost exactly twice as much. Hence the molecular weight of KCl in solution would appear to be half what its formula demands, or, which is the same thing, it is split up entirely into free potassium and free chlorine atoms, or quasi-molecules, as they are supposed to be capable of independent existence. And what is true for potassium chloride is true for electrolytes in general. Again, if what is known as a semi-permeable cell be prepared—that is, an earthenware cell lined with a gelatinous membrane, such as silicic acid or copper ferrocyanide—and a solution of a given substance be placed inside, the whole closed, and a manometer attached, we shall find on immersing the cell in water that a definite pressure is registered on the manometer, which, again, depends on the molecular weight of the dissolved substance. And it is found that the same substances—namely, electrolytes—that give abnormal results with the freezing point method give abnormal results in this way as well. There is yet a method of taking the

molecular weight of dissolved substances, which depends on the lowering of the vapor pressure of the solvent. And in this case as well, the abnormalities appear in the same bodies, electrolytes, as in the two cases above mentioned. Not only do these abnormalities appear for the same substances in these various cases, but they appear always in the same direction and to the same extent. If, for example, there appear to be two-thirds of the molecules decomposed according to one method, the same result is obtained by the other methods. By these various methods, and by electrical evidence, it would seem that the number of "ions," or "sub-molecules," into which the halogen salts split up, is two—for example, KCl into K and Cl; in such salts as potassium sulphate, barium hydroxide, etc., three sub-molecules exist; in potassium ferrocyanide, we have five,  $4K$  and  $Fe(CN)_5$ . Now, independently of the truth or the reverse of this theory, it is clear that analytical chemistry is, to a large extent, based on the exchange of ions. Potassium chloride, for example, has potassium and chlorine for its ions, potassium chlorate, on the other hand, has potassium and  $ClO_3$ . Silver nitrate is, therefore, a reagent not for chlorine, but for the "ion" chlorine: and, in the same way, we know that ammonium sulphide gives a black precipitate with ferrous sulphate where the "ion" Fe exists, but with potassium ferrocyanide with the "ion"  $Fe(CN)_5$ , exists we get no precipitate. This seems best explained on the assumption that the salts are actually dissociated, and that is only between silver and chlorine in the state of free elements in solution, that inter-action can take place. Furthermore, there are many reactions which undoubtedly take a finite time for completion, which would be best explained on the assumption that partial dissociation exists, and that as the free ions interact, further dissociation takes place to provide more free ions. The question, then, as to what salts are really in solution when we mix, for example, sodium chloride and magnesium sulphate in water, receives a definite answer if this theory be true. No salts are in solution but a mixture of sodium, of chlorine, of magnesium, and  $SO_4$ . These free ions are capable of combining to give different salts according to the condition of the experiment. By heating to evaporate the solution NaCl and  $MgSO_4$  are formed on account of the lesser solubility of NaCl, whereas at ordinary temperature Na $_2$ SO $_4$  is deposited on account of its greater insolubility at the temperature of operation. Now on electrolysis it is assumed that the ions, charged heavily with electricity, move in certain directions, led by the current, until they arrive at the anode and cathode respectively, where they give up their charges. On the first view it would certainly seem absurd to believe that a clear solution of potassium chloride contained free potassium, so well known as a solid body, and free chlorine, a yellowish gas. But we must remember that electric charges alter the properties of bodies exceedingly, and what we are supposed to be dealing with is not free potassium and free chlorine, but these elements with heavy charges of electricity, which, when led to the metallic plate, give up these charges and appear in their ordinary form. A very striking experiment in illustration of this has been, I believe, actually performed by Ostwald. Two glass beakers are filled with a solution of potassium chloride, and connected with a metallic siphon. A conductor, charged with "negative" electricity, is brought close to beaker No. 1. The result is that beaker No. 1 and its contents will be charged positively, and beaker No. 2 and its contents will be charged negatively. Now remove the siphon, and finally the charged body; the beakers will now remain as they were, charged with electricity of

opposite sign. If the dissociation hypothesis be true the free ions must have moved along with the electricity—that is, there must be an excess of positive ions that is potassium atoms in No. 1, and an excess of negative or chlorine atoms in No. 2. Being heavily charged with electricity, however, they would not appear as such. But on discharging the beakers, it is seen that this is actually the case, for chlorine gas appears in No. 2, and free hydrogen, that is, of course, on account of the action of the potassium on the water in No. 1. Thus the ions, having given up their charges, appear as ordinary elements. Now, after understanding that such a state of dissociation does exist, it becomes important to learn if entire or only partial decomposition has taken place. It is found that in the case of good conductors practically complete dissociation takes place in very dilute solutions; whereas in the case of poor conductors there never happens such complete dissociation. By a process of mathematical reasoning, which need not be here reproduced, it is shown that the proportion of decomposed molecules in

a given solution is given by the equation  $M = \frac{K}{K'}$ ,

where  $M$  is the fraction of the molecules that is dissociated,  $K$  is the "molecular conductivity for electricity" of the solution and  $K'$  the same for a solution of the salt infinitely dilute. And the results obtained in this way agree entirely with those found by the freezing point and other methods. In England this theory has many opponents—notably, S. U. Pickering and Dr. Armstrong, who tells us he believes it to be merely "fashionable" to support it. However, there appears to be much to be said for it and much against it, and time alone must settle whether we are to stick to what our grandfathers taught us, or take up the "new-fangled" ideas about solution.

#### Pernambuco Jaborandi.\*

BY E. M. HOLMES, F.L.S.,

Curator of the Museum of the Pharmaceutical Society of Great Britain.

The leaves and fruit of the Pernambuco jaborandi were described and figured in the *Pharmaceutical Journal* eighteen years ago,† but until quite recently I was unable to obtain the inflorescence in good condition. At the time I pointed out that the plant was probably distinct from *Pilocarpus pinnatifolius*, Lem., under which name the drug has been frequently described.‡ There is little doubt, however, that an inferior variety of jaborandi, said to be collected near Asuncion, in Paraguay, is obtained from *P. pennatifolius*, since specimens of the fruit taken from the drug in commerce are similar in character, and the flowers are also of the dull purple color, like that of cultivated plants of *P. pennatifolius* in Mr. Thos. Hanbury's celebrated garden near Ventimiglia. The leaves also are thin, obovate, tapering at the base, and the veins on the upper surface are not prominent.

Through the kindness of Mr. R. I. Lynch, F.L.S., Curator of the Botanic Gardens at Cambridge, I received last year a perfect inflorescence of the Pernambuco plant which has been in cultivation both there and at Edinburgh for a few years. The inflorescence proved at once that the Pernambuco plant is a distinct species. The principal distinctive characters were pointed out at an evening meeting of the Society last year (*Pharm. Journ.* [3], vol. xxii., p. 875), but a botanical description of the plant has not yet been published. This may now be given as follows:

*Pilocarpus 'Jaborandi,'* n. sp., ramis erecto-patentibus, ramulis junioribus plus minusve puberulis; foliis alternis imparipinnatis; foliolis oppositis, fere 4-5 jugis, anguste ellipticis, coriaceis, rigidis glanduloso-punctatis, long. 10-15 cm., lat. 2½-5 cm., fere emarginatis marginibusque paululo recurvis, basi inæqualibus, in petioium perbreve 5 mm. constitutis; floribus in racemum terminalem pedalem curvatum rachide gracili dispositis, scæpissime deciduis, pedicellis tenuibus, long. ½-1 cm., roseis, minute bracteolatis, bracteolis subulatis, supra medium dispositis; calyce minuto, 5-angulari non rite lobato; corolla rotata, petalis quinque, ovatis acutis, 1-nervis, pallidoluteis medio transverse roseo-suffusis; disco rugoso crenato, glanduloso-punctato; staminibus quinque, filamentis compressis lineari-attenuatis, antheris innatis; ovario 5-carpellato; fructibus maturis paucis, carpellis convexis apice rotundatis transverse striatis, glanduloso-punctatis, seminibus in carpello singulis nigris nitidis.

Hab. Pernambuco; specimen cum floribus in Hort. Cantab. Angliæ cultis, a me solum visum.

The most marked features in this species are (1) the deciduous pinkish-yellow flowers with slender pink pedicels, (2) the less quadrate, larger, and more convex carpels, as compared with those of *P. pinnatifolius*, Lem., (3) the more leathery leaflets, with elliptic outline, unequal base, and prominent veinlets on the upper surface, the leaflets being normally in four pairs.

As the leaves of *P. Jaborandi* are known to yield more alkaloid than the Paraguay plant, the former only should be official. For pharmaceutical purposes the leaves may be described as follows:

Leaves coriaceous, elliptical, entire, emarginate, somewhat rigid, 10-15 c.m. long by 2½-5 broad, tapering equally towards either end, oblique at the base, with the veinlets on the upper surface distinctly prominent.

#### The Manufacture of Gelatin Dry Plates.\*

BY J. DESIRE ENGLAND.

I do not wish to trouble you to-night with any history of the gelatino-bromide process, but my aim will be to make this paper as practical as possible, and if no very great rapidity of plates is required, I think you will find the process of manufacture a very simple and interesting one, especially to those who have any knowledge of chemistry. There is, of course, as you all know, a very wide range in the sensitiveness of plates, and such sensitiveness depends upon the formula and method of making, connected with many small details which have to be observed. Let us first consider the nature of the emulsion which is to be used in the coating of plates. An emulsion may consist of either bromide of silver or a mixture of bromide and iodide in a very fine state of division, suspended in a solution of gelatin. The preparation of the emulsion may be divided into three stages, the mixing, the emulsification, and the washing. The gelatin employed is of the first importance, and without a suitable sample success is impossible. In the first stage a soft gelatin should be used—say Nelson's No. 1—but for adding afterward a harder kind, such as Heinrich's or Drescher's, must be employed. With regard to the bromide of potassium, the iodide of potassium and nitrate of silver, they must be pure, each make of the different chemicals producing a somewhat different result. There are two or three methods which may be employed in making the emulsion. We can, after mixing, to produce sensitiveness, keep the emulsion stewing for from one to five days, or more at a

\* From *The Pharmaceutical Journal and Transactions*.

† *P. J.*, (3), vol. v., pp. 581-583.

‡ Bentl. and Tirmen, *Med. Plants*, No. 48; *Bot. Mag.*, tab. 7235.

\* Communicated to the Photographic Society of Great Britain.

temperature of from 90° to 95°, or, by raising the temperature and boiling, the same result may be obtained in an hour or two, or even sooner, by the ammonia method. The method of stewing at a temperature of 90° to 95° was, I believe, one of the early methods, Bennett's process. I shall now show you how to make an emulsion by the boiling process, the formula for which is as follows :

## NO. 1.

|                        |           |
|------------------------|-----------|
| Potassium bromide..... | 90 grains |
| Potassium iodide.....  | 3 "       |
| Gelatin (soft).....    | 30 "      |
| Water.....             | 1½ ounces |
| Hydrochloric acid..... | 2 minims  |

## NO. 2.

|                      |            |
|----------------------|------------|
| Silver nitrate ..... | 150 grains |
| Distilled water..... | 2½ ounces  |

## NO. 3.

|                     |            |
|---------------------|------------|
| Gelatin (hard)..... | 150 grains |
|---------------------|------------|

The best temperature for mixing is 110° to 120°. For mixing the solutions, adding the silver to the gelatin, I find the best plan on a small scale is to insert a plug of cotton-wool in a funnel, and then by pushing the wool down, one can very well regulate the speed at which the solution should flow. In the boiling itself, a very small proportion of gelatin is employed, the bulk being added afterward. We add the 2 minims of hydrochloric acid in order to prevent fog in the after processes, on account of the gelatin becoming somewhat alkaline, and also to correct a very slight alkalinity in the bromide of potassium. I need hardly say that all these operations from now (mixing) must be conducted in the dark room. The nitrate solution should be quite clear, and would be so if made with distilled water. The time actually occupied in pouring the nitrate of silver solution into the gelatin solution has a great influence upon the subsequent sensitiveness of the emulsion. In my own practice, where I mix several gallons at a time, I have mechanical means for stirring during mixing, and also during the time of boiling, of which apparatus I have brought a model. The plug of cotton-wool in the funnel serves a two-fold purpose ; it filters out any dirt or other undesirable matter, and it also regulates the speed of the flow. The emulsion, when first mixed, ought to appear of a reddish color by transmitted light. As the boiling proceeds, we shall see that the color will alter, passing from red to violet, bright blue, then green, and finally gray, which latter stage we must avoid if we wish to keep the plates free from fog. It will now be advisable to go into the changes which have taken place in the mixture. The silver of the nitrate has combined with the bromine in the potassium bromide, forming bromide of silver and nitrate of potassium. The nitrate of potassium we shall have to consider presently. There is also an excess of bromide of potassium, that is, more than will combine with the nitrate of silver. The excess of bromide in the emulsion plays a most important part, as, without it, it would be impossible to obtain any sensitiveness, and there would always be danger from fog. I am led to believe, from my own observations, that the changes which go on during boiling are as follows : Bromide of silver being soluble to a slight extent in bromide of potassium, there is a constant dissolving and re-precipitation, and with each precipitation the particles are deposited in a coarser and coarser state. The relative coarseness can be easily examined by means of a powerful magnifying glass. This coarseness will also be seen in coating the more rapid emulsion, as it has not the same covering power as the slower. While this emulsion is boiling, I will show you how to make a more rapid emulsion by the ammonia process. The chief feature is that the nitrate of silver is converted into ammonio-nitrate of silver, and the

free ammonia acting upon the bromide of silver and gelatin, the rapidity of the emulsion is gained in a very short time. The following formula for ammonia emulsion was, I believe, first given by Mr. Henderson, who was a great authority upon the ammonia process :

## NO. 1.

|                        |            |
|------------------------|------------|
| Gelatin (soft) .....   | 30 grains  |
| Potassium bromide..... | 180 grains |
| Potassium iodide.....  | 3 grains   |
| Water.....             | 4 ounces   |

## NO. 2.

|                     |            |
|---------------------|------------|
| Silver nitrate..... | 140 grains |
| Water.....          | 4 ounces   |

## NO. 3.

|              |            |
|--------------|------------|
| Gelatin..... | 360 grains |
|--------------|------------|

Convert No. 2 into ammonio-nitrate with liquor ammoniæ fort., and add to No. 1. The solutions should be mixed at a temperature of about 105° to 110°. The amount of gelatin in this process has a great influence upon the rapidity ; with less gelatin one gets a more rapid plate, but, at the same time, the plates are rather inclined to be thin. In all operations connected with dry plate making, one must exercise the very greatest care in avoiding things which one does not want to get into the solutions. By this time I expect we shall already find some little change in the boiling emulsion. It has become a little more dense, and is passing on to the violet stage. Returning to the ammonia process : We have here a solution of nitrate of silver (No. 2), and we have now to convert it into ammonio-nitrate, and for that purpose it is necessary to have the strongest ammonia possible. First of all, an oxide is formed—oxide of silver—and it is then advisable to add only just sufficient ammonia to re-dissolve the oxide. The solutions should be mixed in the same manner as in the boiled emulsion process, and at a temperature not higher than 110°. That which I just mixed was at a rather higher temperature, and is consequently already in the violet stage. The exact amount of gelatin is of no very great importance and at this stage of the ammonia process we add the gelatin dry.

### The Determination of Hydrastine in Fluid Extract of Hydrastis.\*

BY O. G. EBERHART, PH.G.

Not so very many years ago, the most important constituent of hydrastis was considered to be berberine, and the valuation of the drug was assumed to be accomplished with the estimation of that alkaloid. Since then, however, hydrastine has been found to be medicinally of greater importance, and at present no valuation of the drug or its preparations can be considered complete which does not include an estimation of the white alkaloid. In looking over the literature, very little is found to have been done in this direction. A. B. Lyons (*Am. Jour. Pharm.*, 1886, P. 583 and 586) and also H. W. Snow (*A. J. Ph.*, 1888, P. 494) give some data for its estimation with Mayer's solution, but no specific directions for manipulating the drug or any of its preparations. In the *American Druggist* for 1885, page 84, is a paper by W. Simonson on the estimation of hydrastine in fifty samples of powdered hydrastis. The method employed by him consisted in expelling the alcohol from two fluid ounces of tincture, representing sixty grains of drug, adding water to separate oil, resin, etc., and precipitating the crude alkaloid from the filtered solution with ammonia. This precipitate he collected on a filter, washed it with dilute HCl and water until nothing more was dissolved, when, after again drying and weighing, the difference was taken as alkaloid. The average yield

\* Read at the 12th annual meeting of the Indiana Pharmaceutical Association at Indianapolis, June 7 and 8, '93.

from the fifty samples operated upon by him was 0.125 per cent. Having occasion to investigate a certain lot of fluid extract of golden seal, the writer made a number of experiments, during which it was found that the addition of a small amount of ammonia to the fluid extract caused, after some time, the separation of hydrastine in well defined and remarkably pure crystals, but unfortunately accompanied by a dark flocculent precipitate that would accumulate on the filter into a compact mass very difficult to wash free of alkaloid. In following up this clue numerous attempts were made without success, to avoid the precipitation of this dark substance, but the experiments developed a number of interesting facts.

It was found: First, that by observing proper conditions, the alkaloid could be obtained in comparatively large, acicular, and nearly colorless crystals directly from the fluid extract.

Second, that the presence of ether in quantity sufficient to saturate the mother-liquor very much assists crystallization and enhances the purity of the product.

Third, that if the fluid extract be heated before adding the precipitant a larger yield of crystals is obtained.

Fourth, that the crystals can readily be separated from the accompanying flocculent precipitate by passing the liquid through a pellet of cotton loosely inserted in the neck of a funnel. The long needle-shaped crystals of alkaloid become entangled and are retained, while the finely divided precipitate is permitted to wash through.

Fifth, that the presence of 20 per cent. to 25 per cent. by volume of official alcohol is necessary in order to secure good crystals, and

Sixth, that a good fluid extract of golden seal should yield from 1.5 per cent. to 2 per cent. of crystallized white alkaloid.

Without going into the tiresome details of many experiments the process finally found to give the best results was the following: Into an Erlenmeyer flask of at least 4 ozs. capacity is put 25 c.c. of the fluid extract. This is heated on the water-bath to a point considerably short of boiling. Ten cubic centimetres of ether are now slowly and carefully added so as not to cause loss by violent ebullition, and last, 25 c.c. of a 2 per cent. ammonia solution or a mixture of 20 c.c. of water with 5 c.c. of ammonia. The contents of the flask are rotated briskly for a few seconds, and the whole then set aside for 12 hours, frequently rotating during the first two or three hours. After 12 hours the liquid is poured off into a funnel, into the neck of which a small plug of cotton has been loosely inserted, and the whole then dried and weighed. When the liquid has all passed through, the crystals remaining in the flask are carefully rinsed into the funnel and washed with distilled water until the washings pass off free of color. The funnel and contents are now dried at a temperature not exceeding 100 degrees C., cooled in a desiccator and weighed. Subtracting from this weight the weight of funnel and cotton, gives the amount of alkaloid obtained.

The fluid extract operated upon in all experiments was made with dilute alcohol, and consequently, after the addition of an equal volume of ammonia solution, the mixture would contain approximately 25 per cent. by volume of official alcohol. This was found to give the most satisfactory results, all proportions having been tried, from 50 per cent. down to 10 per cent. The official fluid extract hydrastis is made with a mixture of three parts alcohol and one of water, which would necessitate preliminary evaporation to 19 c.c., or else the addition of 50 c.c. of ammonia solution in order to reach the same proportion. The addition of ether to a hot liquid naturally results in the loss of a large portion of it, but enough remains to saturate the liquid, which is all that is required. An excess of ether, causing the separation of

another layer, should be avoided. Agitation is necessary, as it facilitates the separation of alkaloid, but violent shaking, especially at the time when crystallization is actually going on, must be avoided, as it results in the formation of many small crystals that are apt to pass through the cotton and be lost. The production of large crystals must be aimed at, and when the process is properly conducted they can be obtained from  $\frac{3}{8}$  to  $\frac{3}{4}$  of an inch or more in length.

The crystals cannot well be collected on a filter, for the impurity spoken of above, which is simultaneously precipitated, will also be retained and necessitate a second or even third crystallization. The use of cotton obviates this. A little practice, however, is necessary in preparing the funnel. If the cotton plug is inserted too tightly it will soon clog and render thorough washing impossible; if too loose, alkaloid may pass through. Very naturally the cotton retains some coloring matter, but this can be ignored as it never amounts to more than a few milligrammes, and does not introduce any appreciable error. If it is desired to determine the amount of berberine also, it can be obtained from the mother-liquor of the hydrastine determination, but the order cannot with advantage be reversed, because, when the fluid has once been treated with acids to precipitate berberine salts, the hydrastine obtained from it is very impure, and also more difficult to purify.

An alternative process of assay, which, however, requires more attention, consists in rendering 25 c.c. of fluid extract alkaline with ammonia, and rotating in a separator with three separate portions of ether, of 15 c.c. each, extracting the alkaloid from the mixed ether washings by agitating them with three portions of 10 c.c. each of two per cent. sulphuric acid, and lastly with 5 c.c. of distilled water, adding to the combined washings 10 c.c. of alcohol, 3 c.c. of ether, and ammonia sufficient to render alkaline. After allowing to stand for six hours, with frequent agitation, the crystals are collected, dried and weighed.

The results obtained in a limited number of determinations by both methods are given in the following table:

|                        | Shaking out<br>Alkaloid<br>from 25 c.c. | Per<br>Cent. of<br>Alk. | Precipitation<br>Alk. from<br>25 c.c. | Per<br>Cent. of<br>Alk. |
|------------------------|---|-------------------------|---------------------------------------|-------------------------|
| Fl. Ext.<br>No. 22907. | .447                                    | 1.78                    | .458                                  | 1.83                    |
| F. E.                  |   |                         | .443                                  | 1.77                    |
| No. 22911.             |   |                         | .442                                  | 1.76                    |
|                        | .455                                    | 1.82                    | .445                                  | 1.78                    |
|                        |   |                         | .485                                  | 1.94                    |
|                        |   |                         | .582                                  | 2.32                    |

A small amount of alkaloid is retained by the mother-liquor, for which, perhaps, a correction ought to be made. The quantity thus lost is proportionate to the amount of alcohol present, and in a solution of the pure alkaloid, under the exact conditions of the assay process, amounts to 0.038 grm. Whether this correctly represents the amount retained by the mother-liquor in the assay of the fluid extract is a point that remains to be determined before the correction can be applied. The process has not yet been adapted to the assay of the drug, the tincture, the so-called non-alcoholic fluid extract, nor the various fluid preparations of hydrastine.

In conclusion I will say that this assay process could be utilized in the manufacture of the alkaloid, and considering the largeness of the yield and the ease with which it can be isolated, there seems no reason why hydrastine should continue to command the enormously high price that has prevailed in the past.

## Medical Notes.

**Ichthyol** is highly recommended by Dr. Damiens, subcutaneously, as an anodyne, particularly in cases of neuralgic pains associated with inflammatory processes which have caused exudation; in addition to the absorption of the inflammatory swelling, it effects the suppression of the pain.—*Am. M. S. Bull.*

**Antipyrine Habit.**—A case of antipyrine habit is reported, in which the patient, a nervous woman of twenty-three, had used the drug for headache. For two years she had taken nearly eight grammes a day. The symptoms were those of great prostration, muscular weakness and insomnia. In the gradual reduction of the dose caffeine was used to meet the functional disturbance. A cure was finally accomplished.—*Boston Medical and Surgical Journal.*

**Salicylic Acid for Tape-Worm.**—Ozegovski recommends the following treatment for tape-worm. The patient takes no mid-day or evening meal, and at bed-time is given 30 grammes of castor-oil. The following morning at 7 o'clock a second dose of 15 grammes of castor-oil is given. An hour later one gramme of salicylic acid is given, to be repeated every hour to four doses. If the worm is not expelled by this time a third dose of castor-oil is indicated.—*Münchener Med. Woch.*

**Antiseptic Treatment of Gleet.**—Dr. WATIER tried to use injections of sublimate in the case of gleet, but the solution of one ten-thousandth part is still caustic, and the solution with one twenty-thousandth is not active enough. He uses the following formula:

|                            |                      |
|----------------------------|----------------------|
| Distilled water.....       | 1,000 gmc. [2 pints] |
| Antipyrine.....            | 10 gmc. [3 iss]      |
| Bichloride of mercury..... | 10 cg. [gr. iss]     |

Patients must take three or four injections a day, in preference after micturition, and the liquor must be kept in the urethra as long as possible, at least half an hour; it is best to use it tepid.

**Digital Compression in the Vomiting of Anæsthesia.**—Dr. Bernard Joos describes a method for the control of the hiccough and vomiting during anæsthesia, which he has found successful for several years. It consists in digital compression of the phrenic and vagus nerve against the sternal end of the clavicle. His method is as follows: As soon as singultus or vomiting begins, the etherizer presses the last phalanx of the left thumb firmly over the sternal end of the clavicle, the body of the thumb being parallel with the clavicle and the hand resting on the chest. The pressure is made with the radial side of the thumb. The vomiting stops at once, as a rule. If needed, or more convenient, the pressure may be made on the right side. Pressure is continued for a few moments to prevent a return of the vomiting. He recommends the trial of this method in cases of sea-sickness.—*Korrespondenzbl. Schweizer Aerzte.*

**Treatment of Typhoid Fever.**—Dr. Hälscher has obtained excellent results from the administration of twenty grains of carbonate of guaiacol, morning and evening, in the treatment of typhoid fever. Under the influence of this agent, combined with acetonalide, the

temperature falls rapidly and the malady is cut short by several days. Carbonate of guaiacol acts chiefly as an antiseptic of the intestines; it has also a very favorable effect on the bronchitis which too frequently accompanies this fever.—*Med. Press and Circular.*

**Solar Cautery.**—Dr. C. M. Richter states in a paper read before the San Francisco County Medical Society that he has obtained the best results from the use of the concentrated rays of the sun as a cautery in the treatment of capillary aneurisms, varicose veins, indolent, chancroidal and rodent ulcers, epithelial cancers, birth, India ink and powder marks, bleeding vessels and surfaces, hemorrhoidal and erectile tumors, morbid growths, such as warts, moles, small wens and all skin diseases of a parasitic nature. It has the advantage that it is always under the control of the operator, that the irritation and inflammation following its application are of exceedingly short duration, the pain subsiding immediately on the removal of the lens, the rays of the sun apparently possessing a hitherto unexplained curative power.

**Carbolic Acid and Vaccine Lymph.**—W. Alexander, M.D., writing to the *Lancet*, says: A short time since I had occasion to vaccinate eighteen men, but having only one square of lymph, sufficient for fifteen persons, I proceeded to dilute it by adding three drops of what I considered to be pure water from a vessel placed at hand to receive the points as they were used. On inspecting the arms on the eighth day, I was surprised to find that all had failed with three exceptions, one being a previously unvaccinated person, and each of these presented a single modified pustule.

On making inquiry as to the possible cause of so many failures, I remembered the incident of diluting the lymph, and learned that what I considered pure water was a very weak solution of carbolic acid, 1 part in 120, thus showing that  $\frac{1}{120}$ th of a drop of carbolic acid was sufficient to render almost innocuous the infecting element of fresh vaccine lymph.

**The Cure for Wine, Woman and Song.**—The *Medical Record*, of New York, in referring to an article on wine, woman and song by Dr. Frank Kraft in the *Medical Advance*, remarks that Dr. Kraft finds that excesses of wine, or rather alcohol, breeds three kinds of drunkards, each of which is best set up by certain remedies. These are his three pharmaco-clinical types: "Nux vom. for the beer drunkard, gelsemium for the champagne drunkard, and sulphuric acid for the 'rot-gut' whiskey drunkard." It appears from this that the hard drinker has only to make an intelligent diagnosis of himself and then fill his pockets with sulphuric acid, nux or sempervirens, as the case may be, in order to keep in good condition.

"Woman," Dr. Kraft thinks, "has caused man considerable trouble," and this cautious estimate of social history will not be generally disputed. We turn with some interest to find the drug which solaces man when he has had embittering experiences. Hyoscyamus, we find, is suited to relieve a disappointment in love so severe as to make the victim turbulent, talkative and irritable. Henbane quells the noisy lover.

Belladonna helps the moody, sleepless and dangerous man. Let the ladies take notice, and reject their suitors with vials of the proper antidote. Nux vomica is for the passionate, sensual fellow who loves not well but for amorous ends, while staphisagria cures the man who is simply humiliated and mortified at his refusal. "If disappointment in love makes a man swear, give veratrum," says Kraft; "if it makes him lie give anacardium, and if it makes him a blackguard give chamomile. If he is intensely erotic, let him chew camphor."

For the ills that come from song, Dr. Kraft does not say so much. He is vindictive toward tenors who sing too much and thinks they may be helped by stramonium. For the ill effects upon man of the song of others, his list is far too short, and includes only natron mur. followed by sulphur and belladonna. The foregoing is contemporary medicine, though it sounds like a dream-book.

#### Aleuronate for Diabetics.

Professor H. Baidon communicates to the *American Medico-Surgical Bulletin* an adaptation of Prof. W. Ebstein's conclusions as to the therapeutic value of vegetable albumen in the form known as aleuronate.

Aleuronate is a fine flour, yellow, and nearly devoid of taste and smell. Its chemical analysis shows that it contains between 80 and 90 per cent. of vegetable albumen. There is to be found in it, besides this proteid, 7 per cent. of carbo-hydrates, and 8.8 per cent. of water. Aleuronate is absolutely stable, and undergoes in itself neither decomposition nor putrefaction. It is not affected by changes of climate, which is not always the case with many other forms of gluten flour and their preparations. A superior value is claimed for aleuronate as a human food, both in health and disease. It is claimed to have been proved that the vegetable albumen of aleuronate can be utilized as well as the proteids of the animal kingdom; besides, it is less expensive than animal proteids.

Prepared according to the rules of Hundshausen, aleuronate is a fine flour, nearly unchangeable in a dry place. Heat does not dry it like most of the ordinary forms of gluten flour.

To make bread, instead of trusting to the baker, these general rules must be strictly followed: Great cleanliness of the utensils and purity of the ingredients must be the starting-point; well-rising yeast, more active or more abundant than for ordinary bread, a specific quantity of liquid to a given amount of flour; a good bread-oven of any kind for the cooking.

#### BREAD FOR DIABETICS.

To make this bread, take 600 grammes of ordinary flour; 150 grammes of aleuronate flour, 20 grammes of yeast, half a pint of milk,  $5\frac{1}{2}$  grammes of coarse salt, and about 1 gramme of sugar. The flour, the aleuronate and the recipient must first be heated to about 30° C. [86 F.]. They must be well mixed,—as follows:

Half the milk must first have been heated to about 30° C. [86 F.], the sugar then added to it, and this mixture poured over the yeast, which must have been previously crushed, or finely pulverized. This complex mixture must then be left to ferment in a warm place, the temperature of which is not higher than 30° C. [86 F.]. When the yeast has worked sufficiently to cause effervescence, the fermented liquid must be poured into the middle of the aleuronate and flour. The whole is then gently stirred, and the other half of the milk heated the same as before, and with the salt previously added to the milk, is introduced; which completes the mixture. The dough must then be kneaded lightly with the hands; and when the loaves are well raised, they must be coated with butter and baked with a rapid fire

If the loaf is not eaten the first day, it must be re-cooked the next day, just before it is expected to be used. This bread is now supplied regularly by Fluschnan's bakery in this city.

#### Treatment of Erysipelas of the Face.

Dr. Petrini treats as follows erysipelas of the face, and assures us that he has always obtained very good results. He commences by administering the following purgative:

Calomel.....grs. xv.  
Scamony.....gr. viii.

Divide into two wafers, to be taken in the morning within half an hour of each other.

His local treatment is as follows:

Corrosive sublimate.....gr. ii.  
Collodion.....ij.

Paint the face over twice a day for three or four days.

The patient is put on milk diet, and on the second day two of the following pills are given every two hours:

Sulphate of quinine.....3 ss.  
Ipecac.....grs. vii.  
Syr. of tolu.....3 ss.  
Extract of gentian.....ss q. s.

Divide into twenty pills.

Dr. Petrini affirms that with this treatment isolation is superfluous.—*Med. Press and Circular.*

#### FAVORITE PRESCRIPTIONS.

##### BROMOFORM FOR WHOOPING COUGH.

(BURTON-FANNING IN *Practitioner*.)

Bromoform.....Mi  
Pulv. tragacanth comp.....3 ss  
Syr. simp.....3 ss  
Aqua ad.....3 ss

For children under one year, *Mss.* From one year to three years old, *Mi.* From three to six years old, *Mii* thrice daily. These quantities may be gradually increased until the doses are doubled. As bromoform is a heavy liquid, the mixture should always be shaken.

##### TO PREVENT PITTING IN SMALL-POX.

(LEBESQUE.—*Med. Week.*)

Corrosive sublimate.....of each 1 gme. [15 grains.]  
Opium extract.....5 gme. [1½ fl. dra.]  
Alcohol.....5 gme. [1½ fl. oz.]  
Glycerin.....60 gme. [2½ fl. oz.]

Paint frequently on the face and neck, so as to keep the parts constantly moist.

##### HAIR TONICS.

(*Chemist and Druggist.*)

I.

Tr. cantharidis.....ij  
Spirit ammon. arom.....iss  
Tr. cinchon. rub.....ij  
Ol. rosmar.....max  
Perfume.....q. s.  
Glycerini.....ij  
Aqua ad.....xx

Mix the tinctures and spirit, add oil and perfume, then the water in which has been suspended  $\frac{1}{2}$  oz. of magn. carb. levis, filter through a wetted filter paper and add glycerin to filtrate.

II.

Liq. epispastic. B. P.....3 iij  
Acid. acet. glacal.....3 iij  
Eau de Cologne.....3 iij  
Glycerini.....3 iij  
Aq. ros. ad.....max

# Educational.

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## PRACTICAL SUGGESTIONS TO THE STUDENT.

The selection of a college is a momentous epoch in the career of the young pharmacist, and the various advantages and disadvantages of the different schools should be most carefully weighed.

The question of expense, while a very important one, should not be allowed too great weight. It unfortunately sometimes happens that the would-be student is so situated that monetary considerations are of paramount importance. In most cases, however, the selection of a more expensive course merely means a little more rigid economy, possibly some self-denial, and if it is merely *self-denial* that is involved by undertaking what the embryo pharmacist is convinced is the best course, he should not hesitate, but take up the best. The very self-denial involved will of itself be an important and helpful factor in the development of his character, and the development of character is one of the most important functions of all education.

The student having selected the college which he wishes to attend must now determine whether or not he will endeavor to earn his own support by seeking employment during the college session. Here, again, it may be that fortune or misfortune leaves the student no option or he may have determined this beforehand by selecting as his alma mater some college whose roster is so arranged as to require all of the scholar's time during the sessions. The ideal student life has no division of interest. It means an uninterrupted devotion to study and experiment, but where financial considerations make it necessary for the student to accept an engagement during his attendance on college it by no means follows that he is thereby compelled to take a low rank in his class. Indeed, if his experience prior to entering college happens to have been in a country town, he will find that the necessity of working in a city store is by no means an unmixed evil, the experience gained, if it be of the right kind, being of the greatest possible advantage to him in his after life.

Our student having decided, we will say, to attend a school in a large city some distance from home, and finding that it will be necessary for him to seek employment, should at once communicate with the secretary of the college, who will always endeavor to aid him toward procuring employment. The character of employment he should seek must be governed by his previous experience, his attainments and his plans for the future.

He should endeavor in taking a situation to obtain one where his defects of training or attainment can be most thoroughly made good.

If his prescription experience has been limited he should go to a large store in the wealthier residence portion in the city.

If his knowledge of manufacturing be deficient he should supplement it by seeking an engagement with a manufacturing pharmacist, preferably one of those retail pharmacists who manufacture on a small scale mostly for their own wants. The advantage offered by such a position is that a much more varied and available knowledge is gained than in a strictly manufacturing plant, where during his one or two years

engagement he would probably be confined to one class of work.

If it is in the line of theoretical knowledge that our student is weakest, he may find in the suburbs an opening in the store of some physician, one of the smaller stores in the poorer sections where the store is mainly or wholly dependent upon the prescriptions of the owner. Here he may get his board and a small salary. He may be closely confined, but will probably have a good deal of time in the store for study, a definite understanding being arrived at beforehand, that the student may utilize his spare time in the store in study.

He should not wait, however, to begin his studies until he reaches his college, but should at once begin to prepare himself as best he can to profit by the lectures and lessons he is about to take up.

The student should not neglect to read the pharmaceutical journals. They give a kind of reality and personal interest to the studies being pursued. The seemingly dull and monotonous detail of cellular structure may chance to be touched upon in some article in a way to illuminate and vivify the whole subject, or some stray paragraph may happen to furnish an illustration of the phenomena of polarity which will clear up the fog, heretofore surrounding the subject in the mind of the student.

And above all, dear student, be true—not merely commercially true but with that profounder adherence to truth in its minutest detail to which all scientific progress is due. If a reaction is not *exactly* right it is altogether wrong; do not delude yourself by thinking "that's good enough;" do it over again until it is *exactly* right. Along these lines only can substantial progress be made.

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We continue below the sketch of the colleges of the United States begun in the last special issue.

**The Chicago College of Pharmacy.**—It was organized thirty-four years ago by a number of the most progressive pharmacists of the city. There are only two colleges of pharmacy which are older than the Chicago, and when we recall the fact that the city itself is only fifty-six years old, no other college can claim such great age when compared with the age of the city in which it is located. The college is conducted so as to aid young men in obtaining knowledge and thus improve the status of the profession. The fees are only about one-half what are charged by some other well known colleges, the running expenses are paid and tuition fees are placed at the figure which experience demonstrates is just sufficient to cover the outlay.

The college prides itself upon being provided with every facility for instruction and in being progressive in taking advantage of any and every thing which will promote the interest and welfare of the student. The faculty is selected from well known and experienced pharmacists. The veteran teacher, N. Gray Bartlett, lectures on chemistry. F. M. Goodman is dean and lecturer on materia medica and botany, and director of the microscopical laboratory. C. S. N. Hallberg is lec-

turer on pharmacy, while the laboratory of this department is in charge of Prof. F. S. Hereth. A. G. Manns lectures upon physics and general chemistry, and has charge of the chemical laboratory, while the dispensing laboratory is in charge of Hugo W. C. Martin. On account of the World's Fair the college defer their opening till Oct. 17, this being about the middle of the last month of the Fair, so that students may come a couple of weeks before lectures commence and visit the Fair, or may do this on alternate days during the latter part of the month while both Fair and college are in session. Students should send to W. B. Day, 465 State street, Chicago, for the thirty-fourth annual announcement. The graduates number about 800.

**Louisville College of Pharmacy** was organized in 1870 by the efforts of the pharmacists of that city, and has continued its work with careful pertinacity more as a duty and labor of love than as a source of profit. Its faculty are L. D. Kasterbine, B. Buckle, O. C. Dilly and O. E. Mueller, with an assistant for each as instructors. The lecture hours are divided so that on Monday and Friday afternoons chemistry and pharmacy are the subjects of consideration, while materia medica and botany are given on Tuesday and Friday evenings. For laboratory work 62 hours in each session is assigned, and is obligatory, the pharmaceutical taking two mornings and chemistry three afternoons each week. The sessions run from September to January, both inclusive, and the Summer session from February to June, inclusive. The Summer session was inaugurated last year at the urgent request of students from the South, and it is more in the nature of an experiment. The total expense of instruction, lectures, laboratory classes and instructors' quiz classes for the two sessions is \$145. The last Winter session was attended by 40 juniors and 26 seniors. Of the latter 15 graduated, making the total to date 204 graduates. The present Summer class numbers 26 students. The prizes of gold medals are plentiful, no less than eight being distributed at the commencement in February last. The college requires preliminary examination and thesis. For prospectus address Fred. C. Miller, secretary Louisville College of Pharmacy, Market and Clay streets, Louisville, Ky.

**Cincinnati College of Pharmacy** was organized in 1871 and in its earlier years had the guidance of an excellent faculty, among whom were J. F. Judge, E. S. Wayne, A. Fennell, J. U. Lloyd and others, and they have worthy successors in the present faculty, C. T. P. Fennell, J. H. Eichberg, A. Leué, C. B. Harvey, O. L. Cameron, T. Wetterstrom and W. Simonson, the two latter being in charge of the pharmaceutical and chemical laboratories. The session lasts a full six months from September to March. There is a Summer course in botany, which is optional, but the course in microscopy and laboratory work is obligatory. Preliminary examination is a requisite for admission and a thesis for graduation. The award of medals for merit is liberal. The expense of the entire two sessions is \$135. The lectures and instruction are all given during daylight, the lectures on the afternoons of Mondays, Wednesdays and Fridays, while the laboratories are open for class instruction on four days of the week. For prospectus address W. Simonson, Cincinnati College of Pharmacy, Cincinnati, Ohio.

**California College of Pharmacy** was organized in 1872, largely through the efforts of Emlen Painter, and W. M. Searby, who gave their services as members of the faculty in order to establish the good work begun. It is well located, a comfortable building, ample in its resources and with an excellent corps of instructors, consisting of William T. Wenzell, H. H. Behr, C.

A. Seifert, F. T. Green, J. J. B. Argenti, W. M. Searby, aided by six instructors. The lectures are all given in the morning between the hours of nine and twelve each day excepting Saturday. Microscopy is obligatory, as is also laboratory instruction, in which the junior class receive their instruction during the lecture term, and the senior between the junior and senior terms, commencing about February 1. Preliminary examination, four years' experience and two sessions' attendance on lectures are requisites. The lecture term begins in April and continues until October. Prizes of a gold medal and microscope to the most meritorious of the senior class, and to the junior who attains the highest standing a set of tickets for the senior year, are annually offered. The fees for the two years inclusive are about \$172. During the past year there were 66 junior students and 41 seniors, of whom 33 were graduated. The total number of graduates to date is 208. For prospectus address W. M. Searby, 400 Sutter street, San Francisco, Cal.

**National College of Pharmacy** was established through the active work of the pharmacists of Washington, D. C., in 1872. The medical department of Columbia University had previously been giving pharmaceutical instruction, but on the establishment of this college discontinued it in its favor. The faculty are Samuel Waggaman, Henry E. Kalusowski, Frederick A. Holden and William Hillebrand, aided by instructors. Preliminary examination or a certificate of school examinations equal to the high school of the District of Columbia is required for matriculation. Washington has many attractions for the student besides its natural beauty and society, among which are the libraries, museums, botanical gardens and public buildings. The college is a convenient and well-arranged building, centrally located and admirably adapted for its purpose. The lectures are given in the evenings of Monday, Tuesday, Thursday and Friday. At its recent session there were 46 junior and 24 senior students, and of the seniors 12 graduated, making the total to date 190. During the coming year more time than heretofore will be given to laboratory work. The total expense for the two years' course is \$138. For copy of the prospectus address H. E. Kalusowski, 808 I street, Washington, D. C.

**The Pittsburgh College of Pharmacy**, which was organized in 1878, in its new and commodious quarters, located at the corner of Market and Water streets, Pittsburgh, offers to students excellent facilities for acquiring a thorough pharmaceutical education. The college now has three spacious and well-lighted lecture halls, thoroughly equipped with every convenience and facility for the illustration of all subjects brought before the students. The laboratories are equally large and well lighted, and complete in all their appointments, each table having gas, water, and closets for the storing of apparatus; a separate outfit being furnished each student. A course of lectures on microscopy and a microscopical laboratory have also been lately added.

The college is situated in the heart of the business portion of the city, convenient to all the railroad depots and street railways, making it convenient of access. In the laboratories, as in the lectures, a graded course will be pursued, each student receiving individual instruction and attention. The course in the chemical and pharmaceutical laboratories is obligatory.

The fees for each term are \$65, which include matriculation fees, lecture tickets, laboratory fees and quizzes.

The faculty is composed of Adolph Koenig, professor of materia medica and botany; Julius A. Koch, professor of theory and practice of pharmacy; F. T.

Aschman, professor of chemistry ; Gustave Guttenberg, professor of practical microscopy : with the following assistants : A. Herman Poth, in pharmacy ; John A. Shafer, botany and materia medica ; John D. Campbell, chemistry.

The lectures and laboratory work are all done in daylight hours. There is no entrance examination, but at the close a satisfactory examination must be passed before the junior can become a senior. A thesis is required of each graduate. The lecture course covers nearly six months, and will be more complete this coming session than ever before. The number of graduates at last session was 22, which makes the total to date 137. The class numbered nearly 100 students.

The session of 1893-'94 will begin October 2. Write for prospectus to Prof. Julius A. Koch, Dean, P. O. Box 719, Pittsburgh, Pa.

**Albany College of Pharmacy.**—This college represents the Department of Pharmacy of Union University and was organized in 1881. Its lecture rooms are situated in the building of the Albany Medical College and include chemical and pharmaceutical laboratories fitted out with the most recent improvements. The faculty comprise Willis G. Tucker, Alfred B. Husted, Gustavus Michaelis and F. P. Husted, assisted by three instructors. A preliminary examination is required for matriculation and a thesis for graduation. The lecture course extends from October 5 to March 1, and is so arranged as to provide for evening lectures only, with the exception of Saturday, when an afternoon lecture is given. Laboratory work is carried on during the morning and afternoon, 200 hours in all being devoted to this branch. A more thorough system of quizzes and recitations is to be introduced this year. Two prizes are offered at the close of each term, one of which is for the best examination in each class. Seventeen students were graduated at the last session and the number of senior and junior students at that time was respectively 31 and 25. The total expense of lectures, including all fees, for the two sessions is \$124. For prospectus address A. B. Husted, M.D., 144 State street, Albany, N. Y.

**Purdue University**, located at Lafayette, Ind., became in 1884 the patron of pharmacy by the establishment of a department of pharmacy. For years the pharmacists of the State have labored for a pharmacy law, but some political "pull" has prevented them from accomplishing their desire. But this is counteracted in a measure by the establishment of this excellent school of pharmacy. Its faculty are A. L. Green, dean, in charge of chemistry ; Stanly Coulter, in charge of botany ; J. W. Stuermer, in charge of pharmacy ; Geo. Spitzer, in charge of prescription work ; and they are aided by competent instructors in each department. During the past session there were 89 students in attendance, including two ladies. Twenty-two graduated last commencement.

Students are engaged at the University about *forty hours* each week ; about two-thirds of this time is devoted to laboratory work, and one-third to lectures.

In all five laboratories are open for the use of the pharmacy class. There are a fine collection of buildings connected with the university, and excellent libraries. The expense for two years' tuition, lectures, laboratory and all expenses of the institution are about \$90. For prospectus, address Arthur L. Green, Dean of Purdue School of Pharmacy, Lafayette, Ind.

**University of Kansas** is located at Lawrence and is under the patronage of the State. The department of pharmacy is under the care of L. E. Sayre, who in 1885 was called to the chair of pharmacy. His associates are E. H. S. Bailey, chemistry and toxicology ;

L. I. Blake, physics ; F. H. Snow, botany ; S. W. Williston, anatomy and physiology, and D. H. Robinson, Latin, aided by six instructors. An entrance examination is required, two years' attendance at lectures during the morning hours and laboratory practice in the afternoon. Each term begins in September and continues until June. While the instruction is thorough the expense is shown by ciphers, for it is practically free, the total expense being but nominal. The graduating class, which numbered 16 at the last session, are examined by a board of pharmacists. The chemistry building, which is divided between chemistry and pharmacy, is excellently equipped for work and the student has many advantages in his studies. For prospectus address School of Pharmacy, Lawrence, Kan.

**Ohio State University**, at Columbus, Ohio, has the school of pharmacy under the control of the faculty of the University, but more directly under the supervision of the Pharmacy Committee. While the pharmacy students have the privilege of many of the lectures on the allied sciences, the portion of the faculty that have the branches most akin to pharmacy are S. A. Norton, chemistry ; N. W. Lord, metallurgy ; N. S. Townsend, materia medica ; G. B. Kauffman, pharmacy ; W. A. Kellerman, botany ; A. M. Bleile, physiology and microscopy, and a corps of assistants as instructors. During the past session there were 38 students and five graduates.

In the laboratories not less than 30 hours will suffice and the student may utilize 48 hours. The libraries, laboratories, museums, and all facilities of the institution can be availed of by the pharmacy students. The term for graduation covers three sessions or years, of eight months each, and the total fees for the entire course (three years) is not to exceed \$100. There is no fee for tuition in any department. For prospectus, address George B. Kauffman, Columbus, Ohio.

**Buffalo College of Pharmacy**, organized in 1886, has been favored with prosperity, and this is due largely to the enterprise and energy of its faculty and officers. During the past year the college has moved into a large and handsomely fitted new building, which will be jointly occupied by the medical department of the University of Buffalo and the Buffalo College of Pharmacy. Its faculty include : David S. Kellicot, emeritus professor of botany and microscopy ; Enoch V. Stoddard, emeritus professor of materia medica ; Rudolph A. Witthaus, emeritus professor of pharmaceutical chemistry and toxicology ; Willis G. Gregory, professor of pharmacy and director of the pharmacological laboratory ; Ernest Wende, professor of botany and microscopy ; Eli H. Long, professor of materia medica ; John R. Gray, professor of pharmacognosy ; Herbert M. Hill, professor of general and analytical chemistry ; A. L. Benedict, lecturer on botany ; E. Carlton Sprague, special lecturer on medical jurisprudence, and four assistants as instructors. The course covers six months of lectures by the faculty, and is so given that nearly 300 hours are devoted by juniors and over that amount by seniors to the college work of lectures and laboratory. A perpetual ticket, which costs \$125, entitles the holder to all the privileges of the college from entering to graduating. Prizes of gold medals and scholarships await the fortunate honor men of senior and junior classes. During the past session the number in attendance was 40 juniors and 20 seniors, of whom 22 graduated, making 117 graduates to date. For prospectus, address John R. Gray, Ph.G., 246 Seventh street, Buffalo, N. Y.

**Illinois College of Pharmacy**, Chicago, is the Department of Pharmacy of the Northwestern University.

sity, and was organized in 1886. During the first seven years of its existence it occupied the rooms vacated in 1886 by the Chicago Public Library. During its first Winter term, 1886-1887, it had sixty-two students, and since that time the classes have grown steadily, until the total annual attendance now approaches four hundred.

On the first of March, this year, the college moved to its new home, a commodious and handsome building, six stories high, and covering 11,550 square feet of ground, located on Dearborn street, between Twenty-fourth and Twenty-fifth streets.

In this new building the college has six separate and distinct laboratories, one of the finest lecture rooms in the country, a museum and library, professors' rooms, and all other needful conveniences.

**University of Virginia** (Charlottesville, Va.) in 1886, in deference to the pharmacists of the State, provided a department of pharmacy, that the young pharmacists might find "at home" what they had gone elsewhere to find—more information than could be secured by home study or store practice. The faculty consists of J. W. Mallet, chemistry; F. P. Dunington, analytical chemistry and pharmacy; W. B. Towles, materia medica; A. H. Tuttle, botany. Laboratory instruction is daily for nine months, from four to five hours being thus employed, and three hours daily average of lectures. The expense of lectures for the session is \$120.

**Tulane University** of Louisiana, at New Orleans. The medical department established a course in pharmacy in 1837, and in 1887 a very superior pharmaceutical laboratory for the instruction of practical pharmacy in which Albert L. Metz, a native of that city and a graduate of pharmacy of the New York College of Pharmacy, class of '87, is instructor of practical pharmacy. The other lectures are the same as in the medical department. Pharmaceutical students to graduate must have had two years' practical experience in store, present a suitable thesis and pass satisfactory examinations. The expense for the two years is in the vicinity of \$155. The school is in a very prosperous condition. The next session opens October 20, 1893. For information or prospectus address Prof. S. E. Chaillé, M.D., dean of the medical department.

**Central Tennessee College**, Nashville, has its departments of medicine, dentistry and pharmacy grouped into one general, though each are separate departments. These departments are for the benefit of colored young men alone, as in some other educational institutions they are debarred from the privileges necessary to acquire the desired proficiency. The fifth session will open its course of instruction the third Monday of September and continue until February following. Chemical and pharmaceutical laboratories are open for practical work, as well as the accessories of microscopy, urinalysis and toxicology. Its faculty are W. Sevier, pharmacy; W. Osborn and G. W. Hubbard, botany and materia medica; W. Patterson, chemistry, aided by two instructors. The entire expense for the two years is about \$75. For prospectus address G. W. Hubbard, Meharry School of Pharmacy, Nashville, Tenn.

**Ontario College of Pharmacy**, located at Toronto, Ont., originated in the effort to give young pharmacists a preliminary training that would prepare them to meet the requirements of the Pharmacy Act of 1871, but it was not until 1882 that it became a distinct teaching body. In 1887 the college building was erected, and in 1891 re-modeled and increased to twice its former size. The building with its appoint-

ments is among the first of similar institutions on the American Continent; its laboratories—representing the greater portion of the building—are well lighted and ventilated, and fully equipped with conveniences and apparatus of the latest design.

Its courses of instruction are exceedingly thorough, and more than half the student's time is devoted to practical work in the laboratories.

The course comprises two terms, the junior session beginning Sept. 14, 1893, and continuing for 15 consecutive weeks, the senior session of 18 weeks beginning Jan. 9, 1894.

The requirements are, preliminary examination, four years' experience in retail store, junior examination and satisfactory final examination. The expense for the whole course is about \$100. Board can be obtained in the city from \$3 to \$4.50. The College is now affiliated with the University of Toronto which confers the degree of Bachelor of Pharmacy (Phm.B.).

The professorial staff comprises: Dean Chas. F. Heebner, pharmacy and pharmaceutical laboratory; A. Y. Scott, chemistry and botany; J. T. Fotheringham, materia medica and pharmacognosy; G. Chambers, chemical laboratory and toxicology.

For Annual Announcement, address I. T. Lewis, Registrar, Ont. College of Pharmacy, Toronto, Ont., Can.

A free scholarship is competed for by the junior class, and the recipient has the senior course of instruction without expense. The alumni association also awards to two meritorious junior students free laboratory instruction.

**Ohio Normal University**, at Ada, Ohio, has a department of pharmacy which was established in 1884. During 1891 new and enlarged quarters were provided for the chemical and pharmaceutical laboratories to meet the increased demand caused by large accessions to their class of students. During the week 15 hours are given to lectures and recitations and 30 hours to laboratory work. The faculty of the pharmacy department are B. S. Young, pharmacy and advanced chemistry; E. B. Hall, pharmaceutical chemistry; M. L. Alspach, superintendent of laboratories; J. G. Park, botany and pharmacognosy; H. S. Lehr, dean of the faculty. The total expenses for the full course for all lectures, laboratory and dispensing work is \$60, and room rent and board is \$80 additional. The course extends over 40 weeks. For prospectus address H. S. Lehr, or B. S. Young, Pharmacy Department, Ada, Ohio.

**Iowa University, Department of Pharmacy**, is located at Iowa City, Iowa, and was organized in 1885. During 1891 a new building, costing \$50,000, was occupied by the departments of pharmacy and chemistry. Erected specially for this purpose, it was constructed with the most modern improvements in all respects. Lectures and laboratory work are in the day time, and students are kept busy from 8 A.M. to 6 P.M. The libraries, with over 20,000 volumes, are accessible during these hours, as are also the museums and some departments of lectures in the university proper. Preliminary examination or its equivalent is necessary for entrance. Two years' work in the chemical and pharmaceutical laboratories and, including the college work, four years in pharmacy, with satisfactory final examinations, are necessary to secure the degree of Ph.G. The faculty are E. L. Boerner, pharmacy and pharmaceutical laboratories; C. S. Chase, materia medica; L. W. Andrews, chemistry and chemical laboratories; T. H. McBride, botany; E. W. Rockwood, toxicology, aided by instructors. The expense of the junior course is \$71, and the senior course is \$76.

Laboratory work is divided into chemical, pharmaceutical, botanical and microscopic, and is very full in all its details. For further particulars and prospectus address E. L. Boerner, Iowa University, Iowa City, Iowa.

**Kansas City College of Pharmacy** was organized in 1886, and the same year instruction in pharmacy was begun. During the past year there were in attendance 102 students, 17 of them graduating. The total number of graduates to date is 71. Its laboratories are well fitted and convenient, and 12 hours' work are here required from each student. The lectures are given on three evenings of the week and laboratory work in the afternoons. Its faculty are E. Lanphear, materia medica; R. R. Hunter, chemistry; J. G. Kiefer, botany; W. T. Ford, pharmacy; C. C. Hamilton, demonstrator of chemistry, and H. W. Maloney, demonstrator of pharmacy, the two latter in charge of the laboratories. Preliminary examination is required, two sessions attendance on lectures, laboratory work, including microscopy, thesis and satisfactory examination, to attain the degree of Ph.G. The lecture session opens in October and continues nearly six months. The total expense for all instruction and fees is about \$105. Prizes of gold and silver medals to both senior and junior students are usually made. For prospectus address W. T. Ford, 1305 Cherry street, Kansas City, Mo.

**Denver College of Pharmacy** is a department of the University of Denver, organized in 1887, having a corps of teachers entirely distinct from all other departments of the university. Thus far the attendance has been limited largely to the young pharmacists of Denver and surrounding cities, but ought to embrace a much larger number. Its excellent faculty comprises J. A. Sewall, chemistry; C. M. Ford, pharmacy; J. Kochan, botany and materia medica; J. P. Kinley, microscopy; L. Wallien, in charge of laboratory, and E. Ackerman, J. A. Marlin and T. A. Lyneman as instructors, respectively, in pharmacy, chemistry and materia medica. The lectures are given in the evening, chemical laboratory accessible all day. The expense for two courses, including matriculation and graduating fees, is \$115. Preliminary examination is required. Students have many privileges of the university without extra expense. For fuller information address Prof. J. Kochan, P. O. Box 2667, Denver, Col.

**Department of Pharmacy of Scio College.**—This is a department of Scio College, an educational institution under the control of the Methodist Episcopal Church, and is located at Scio, Ohio, on the Wheeling & Lake Erie and the Pittsburgh, Cincinnati, Chicago & St. Louis railroads. The department of pharmacy was added in 1890, and possesses a full complement of laboratories and equipments. The equipment has lately been materially increased by the addition of a complete drug store, designed exclusively for the purpose of affording practice in dispensing. All laboratory work is obligatory, and averages 18 hours per week throughout the course. The regular course leading to the degree of graduate in pharmacy has been extended to two years, and one year in medical and pharmaceutical Latin has been added to the course. Candidates for graduation must possess a common English education, and all diplomas are withheld until the candidate has passed the examinations of the Ohio Board of Pharmacy. Beginning with the present year, two years of actual experience will be required in addition to the college course. Students in pharmacy are admitted to the other departments of the college for the purpose of making up deficiencies in English education, and to the classes in conversational German without extra charge. The college

fees are \$60 per year. The faculty of instruction are as follows: J. H. Beal, chemistry and pharmacy; W. G. Compher, botany and microscopy; J. M. Adams, materia medica; Otto Sahli, Latin and German, and an assistant instructor in each of the laboratories. For prospectus address J. H. Beal, principal, Scio, Ohio.

**Oregon College of Pharmacy**, at Portland, Ore., is a branch of Willamette University, which was organized in 1889. As it draws its students from that State and has not as yet received the cordial help it deserves, its classes have been meager compared to what they might be, if even the pharmacists of that city were to send all of their employees who ought to be there. It has every facility that the older colleges have, laboratories, etc., and should have a better clientage of students by a score or so. Let Portland and Oregon druggists see to it that they do their clerks and themselves, as also the college, the justice to send more students during the next session. The expense of two sessions of six months each, with other fees, cost about \$112.50. For fuller information address Oregon College of Pharmacy, Portland, Ore.

**Detroit College of Pharmacy**, which was organized in 1890, has very desirable and commodious quarters in the new building of the Detroit College of Medicine, large and convenient rooms being used for the pharmaceutical students for lectures and laboratories. The lectures and part of the laboratory work is done in the evenings. Preliminary examination or its equivalent is necessary to enter; mid-winter as well as final examinations are given, and for final success the standing is based on attendance and standing in recitations, diligence and success in practical work, proficiency in final examination. Good character, 21 years of age, two full terms at college of pharmacy are necessary, as well as the previous requirements stated. The faculty are: J. E. Clark, chemistry; E. J. Kennedy, pharmacy; G. Suttie, botany; L. H. Gardiner, materia medica and pharmacognosy; E. C. Skinner, pharmacal jurisprudence, with assistants in chemical and pharmaceutical laboratories and dispensing department. The expense of the two sessions is about \$100, with opportunities of extra chemical work if desired. The session fills seven months. For prospectus address E. C. Skinner, Detroit College of Pharmacy, Detroit, Mich.

**Atlanta College of Pharmacy** was opened in 1891, and though young in years means good work now and always. It had last Winter 15 students graduating, one who took his second course in that college. The comfortable building in which its quarters are installed gives ample facilities for lectures and laboratory work. The faculty are H. V. M. Miller, dean; W. S. Kendrick, proctor; George F. Payne, materia medica, and toxicology; L. H. Jones, theoretical and analytical chemistry; W. H. Inghram, theory and practice of pharmacy and of botany. The first session involves an expense of \$45, and the second session of \$60. Special class in laboratory work is extra. The candidate for graduation must be possessed of a good moral character and have attained the age of 21 years. He must have attended two full courses of lectures in some reputable college of pharmacy, the last of which must have been in this college, have passed a satisfactory examination in each department, and have had a practical experience of four years in pharmacy, including the period of attendance at college. It is believed that the central location of this college will attract increasing numbers of students from adjacent Southern States. For prospectus address Dr. W. H. Inghram, 341 Marietta street, Atlanta, Ga.

**Minnesota College of Pharmacy** is a department of the State university, the first course in which closed in June of this year. For admission a certificate or diploma of graduation from a high school is required or in lieu thereof the candidate must pass a preliminary examination. Of the applicants for entrance last Fall only 25 were successful in reaching the required grade. The curriculum embraces a special course in pharmaceutical mathematics. The course of lectures and laboratory work extends over 18 full months. The faculty embrace Frederick J. Wulling, dean, lecturer on pharmacy and director of the pharmaceutical laboratory; C. J. Bell, professor of chemistry; H. H. Bracken, professor of materia medica; C. MacMillan, professor of botany; R. O. Beard, professor of physiology; H. C. Staples, instructor in pharmaceutical Latin, and J. A. Dodge, professor of organic chemistry. The expenses for each session including laboratory fees, etc., amount to about \$75. For prospectus address F. J. Wulling, Minnesota University, Minneapolis, Minn.

**Chattanooga College of Pharmacy.**—A pharmaceutical department was organized in 1892 as a department of the Grant University, though managed as a separate and distinct institution. It enters upon its second year with a careful and well selected faculty, among whom are W. A. Applegate, Harry Wise, S. W. Prewitt and M. Block. The session opens and lasts six months.

The requisites for admission are the same as those of all other recognized colleges of pharmacy. The entire expense for the two sessions, including diploma fee, is \$110. The lecture and laboratory hours are to be so arranged as to afford students free opportunity to fill active positions in drug stores in the city, if such is their desire. For prospectus and further information address Harry Wise, 709 Market street, Chattanooga, Tenn.

(To be Concluded.)

### Pharmacy in Germany.\*

"The eyes of all Europe are on Germany. The thinker looks here for appreciation of his thoughts; the dreamer looks to us for the realization of his dreams; the scientists, the men of letters, the sweet singers, and the graceful painters of every country and every tongue look to the great empire of the Teuton for leadership, encouragement and inspiration."—*Kaiser Wilhelm II. at Bonn.*

So spake William, the third Emperor of the Germans; and to the branch of science to which pharmacy belongs his words are peculiarly appropriate, for English chemists may well look to the "Happy Fatherland" for the realization of their most extravagant hopes, as in Germany, and in Germany alone, their art is recognized as an important scientific pursuit, their interests are jealously guarded by the State, their position is freed from much of its commercialism, and competition from outsiders is quite unknown.

While on a recent visit to Hamburg I managed to secure the necessary information concerning the *statu quo* of our German colleagues to enable me to write this short sketch. Hamburg is a typical German town of some 300,000 inhabitants, situated on the river Elbe about 75 miles from its mouth.

It is a gay, bustling place with a quaint Altstadt of picturesque houses, tortuous streets, and sluggish canals, and a fair stately Neustadt enclosing the Binnen Alster, upward of a mile in circumference, and girt on three sides by well-kept quays, planted with trees, and flanked by lines of splendid mansions, hotels and shops. In one of these shops I found a friend in Herr Carlos Bonhoff, a learned young Teuton from Casel, in the Rhineland, who spoke ten

languages, had been an assistant in Fenchurch street, and knew every capital of Europe as well as his own beloved Berlin. I had met him years ago in Dublin on a visit to his sister, a well known teacher in the fair Irish capital, and when I stumbled across him one day in the land of sauerkraut and sausages my heart was glad within me. He brought me to his pharmacy, which was more like a museum than a shop. Everything looked so neat and tidy, and was so carefully stowed away in velvet and beveled glass that one would almost think it sacrilege to ask one of the sad-eyed, spectacled, sallow-cheeked assistants, who glared at the customer from behind the high, carved oak counter, to part with one of the neatly labeled bottles or boxes out of the carefully locked cases. The customers seem to feel that a great honor was being conferred on them by being allowed to stand in the presence of Herr *Apotheke*, for they invariably stood in the dim æsthetic light of the shop, with heads uncovered, and hushed voices waiting uneasily to be attended to, then hurrying rapidly away from the dread presence of the Dispenser of Deathly Drugs. Indeed, how could one feel comfortable in a great cheerless hall fitted in carved oak and pitch pine, with somber cases and rows of queer-looking surgical appliances, suspicious-looking, odd-shaped bottles ranged round the walls, covered with cabalistic figures and interspersed with the curious instruments of the alchemists' laboratory, and "huge, musty tomes of old forgotten lore?" It is all very grand and very stately, your old-world German pharmacy, but, myself, I confess to not feeling very comfortable in it, and finding myself comparing the museum-like stiffness of its arrangements with the enterprising lavishness of some Oxford street and city shows, to the no great advantage of the former. Having inspected the shop and the perfectly equipped laboratory behind it, Herr Carlos introduced me to his study or retiring room—an elegantly-fitted room opening off the dispensing department. Here, on many successive evenings, we discussed politics, science, music, drama and sport, and I was given the following *résumé* of the pharmacy laws of the cynosure of Europe, as Emperor William calls his empire.

As previously stated, pharmacy in Germany is practically a learned profession, and like every other professional pursuit, the entrance to the land of pill-makers is jealously guarded by regulations and curricula which leave the pharmaceutical tyro mighty little option as to the *modus procedendi*.

In Germany the pharmaceutical student must produce a certificate from the State schools showing that he has year by year and term by term studied earnestly and diligently the following subjects, and at all times and at the various examinations satisfied the State inspectors that he possessed a sufficient knowledge of them, *viz.*:—Latin, German, mathematics, grammar, geography, history of Germany and Europe, French, English (in many schools), natural history, including zoology and botany, chemistry, natural philosophy, including dynamics, pneumatics, light, sound, heat and electricity.

Provided with this certificate the pharmaceutical student must find some *apotheker* who will receive him as an apprentice.

Unlike Great Britain, where apprentices are scarce and in great demand, students are plentiful in Germany and masters few.

Frequently the aspirant to pharmaceutical honors will find himself utterly unable to find a master unless he has from 500 to 2,000 marks to invest, in which case, of course, he has not much difficulty. If he is willing to pay a premium, of the latter sum in particular, he

\* Selections from an article by Dr. R. J. Blackham in the *British and Colonial Druggist*.

may even aspire to an establishment with the royal arms of the great house of Hohenzollern over the door. Having found a vacancy, the German aspirant to pharmaceutical honors binds himself to serve faithfully, honestly and well his master, and to be guided by him in his studies for a period of not less than three years. Nor must he waste much time, for at the termination of his apprenticeship he has to present himself for the first special examination for *apotheker*. The subjects of this examination are:

1. *Prescription reading* and prescription writing, including (a) the reading of autograph prescriptions without abbreviations, (b) the detection of errors and unusual doses, (c) the posology of the materia medica, and (d) the writing of prescriptions in the technical form from dictation.

2. *Practical dispensing*, including all the various manipulations which may at any time be required from the practical pharmacist.

3. *Pharmacy*, including the recognition of the commoner preparations of the National Pharmacopœia.

4. *Materia medica*, including (a) the recognition of the roots, barks, leaves, fruits, resins, gums, animal substances, etc., used in medicine; (b) the botanical and zoological names of the plants, etc., yielding them, the natural families to which they belong, and their habitats; (c) the recognition of their purity; and (d) the formulæ of their preparations. It is also desirable that candidates should possess a practical knowledge of the methods of estimating the value of important drugs, and of obtaining their active proximate constituents in a pure state.

5. *Botany*, including the recognition of all the important orders and their members used in medicine, classification, and the morphology and physiology of plants.

6. *Chemistry*. Candidates are expected to possess a very extended knowledge of theoretical organic and inorganic chemistry, and more especially the application of the science to medicine, the preparation of the chemicals used as drugs, and the results of chemical products on the human economy.

They are expected to be able to conduct any *qualitative* or volumetric analysis, but *quantitative* work is not yet included in the curriculum.

7. *Natural philosophy*, including a general knowledge of the laws of natural philosophy, the working of simple problems, in experimental physics, a practical knowledge of the commoner instruments used in physics for the determining of specific gravities, temperatures, densities, etc., and a sound knowledge of light, sound, heat, electricity and magnetism, and the appliances used in these sciences.

8. *Toxicology* or the recognition of the effects of poisons, and the suitable antidotes.

9. *Microscopy*, as applied to pharmacy.

10. *Urinalysis*.

The examination is written, oral and practical, and usually occupies the greater part of the week. The examination in these subjects over, the student proceeds no further in his studies until he has served for a period of three years as assistant to a registered *apotheker*.

Having completed his six years' service as apprentice and assistant the student is compelled to enter one of the many universities of the empire. The course of study which must, according to law, embrace three *semestres* or sessions, of at least six months' duration, includes:

1. Organic and inorganic chemistry.
2. Analytical chemistry, qualitative, volumetric and quantitative.
3. Botany.

4. Natural history.

5. Materia medica.

6. Therapeutics.

7. Toxicology, including forensic analysis, analysis of food, drinks, drugs and tobacco, etc.

8. Microscopy in its pharmaceutical, medical and legal aspects.

9. Natural philosophy.

All of these subjects are studied in the thorough fashion that work is always done at a German college, not only from works of the first authorities, but also practically.

This means two years of constant toil in the laboratory and lecture theater, at the conclusion of which comes the final examination for the title of *apotheker*.

This examination embraces all subjects studied, and lasts from six weeks to two months. It is about as difficult as the examination for the degree of Bachelor of Science of the University of London, the candidates being examined first by papers, then orally, and again practically, in each branch of science included in the curriculum.

Having passed through this ordeal, which is a "*Staats examen*" conducted by examiners appointed by the Crown, and under the direct supervision of the government, the successful candidate is granted a diploma which entitles him to conduct a business provided he can obtain a license or permit from the German Home Office to establish a pharmacy in a certain house in a fixed neighborhood.

Unfortunately, however, licenses are very scarce, and the applications for them may be numbered in thousands, so that the only feasible way of procuring a business of one's own is to buy an established license. For this a capital of between £1,000 and £10,000, English currency, is usually required; it is, therefore, evident that pharmacy in Germany is not a pursuit suitable to poor men, and is not, as in England, the *refugium peccatorum* of the artisan's weakly son.

There are, of course, some poor men in the profession in Germany, but their fate is not a very bright one, as they have to be content with the position of assistant, or enter some of the allied businesses, which are not so strictly preserved as the demesne of Herr Apotheker.

Provided he has the necessary capital to buy his business, the prospects of a chemist in the Rhineland are very rosy, as dispensing and general prices are very good.

The following price list is the rate fixed by the Crown for most towns in Northern Germany:

|                                       | Marks. | Pfennigs. |
|---------------------------------------|--------|-----------|
| Mixtures, 8 ozs.....                  | 1      | 80        |
| Mixtures, 6 ozs.....                  | 1      | 50        |
| Mixtures, 4 ozs.....                  | 1      | 30        |
| Pills, per doz.....                   | ½ to 1 | 0         |
| Liniments, per ounce.....             | 0      | 40 to 80  |
| Lotions, per ounce.....               | 0      | 20 to 30  |
| Syrups, per ounce.....                | 0      | 40 to 60  |
| Powders, per dozen.....               | 1      | 50        |
| Blisters.....                         | ½ to 1 | 0         |
| Plasters, usual size, for back.....   | 1 to 2 | 0         |
| Inhalations per ounce.....            | 0      | 60 to 80  |
| Granular preparations, per ounce..... | 0      | 40 to 80  |

"Cutting" in the sale of drugs is quite unknown, and the usurping of chemists' rights by grocers, a thing unheard of under the Black Eagle of United Germany. That execrable offspring of the meanness and commercialism of the British practitioners of what might be a learned and honorable calling—the "profitable extra"—is, of course, quite beneath the notice of our fortunate German colleagues. Assistants, as would be expected, are in good request, but the supply far exceeds the demand. They are no better paid than at home, perhaps a little worse. The salary of a manager ranges from 1,500 to 2,000 marks per annum, while juniors receive from 500 to 1,000.

## Notes, Queries, and Answers.

We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.

When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.

**Moselle Syrup.**—L. G., Binghamton.—This, like a host of similar titles, is a fanciful term applied to a liquor syrup. It had quite a vogue at one time, and with capillaire and decoctions of a like nature sold well. Here is a recent formula for its preparation:

|                                 |           |
|---------------------------------|-----------|
| Citric acid.....                | 3 i       |
| Angostura bitter.....           | fl. 3 i   |
| Essence of lemon (soluble)..... | fl. 3 i   |
| Essence of vanilla.....         | fl. 3 ss  |
| Caramel.....                    | fl. 3 i   |
| Simple syrup.....               | fl. 3 xx. |

**Mist. Ol. Lini** (Thompson).—Subscriber, N. Y. The formula given below is taken from Prof. W. H. Thompson's work on *Materia Medica*.

|                              |                |
|------------------------------|----------------|
| Linseed oil.....             | fl. 3 xv       |
| Oil gaultheria.....          | ss fl. 3 ij    |
| Oil cinnamon (cassa).....    | 3 iv           |
| Irish moss.....              | fl. 3 xxiv     |
| Water.....                   | fl. 3 v        |
| Glycerin.....                | fl. 3 x        |
| Syrup.....                   | fl. 3 i ss.—M. |
| Dilute hydrocyanic acid..... | fl. 3 i ss.—M. |

Make a mucilage with the Irish moss and water, and with this emulsify the oils; mix the hydrocyanic acid with the glycerin and add to the emulsion; lastly, add the syrup and mix thoroughly.

**Pomegranate Syrup.**—E. H. Santa Barbara, Cal.—The *National Druggist* gives the following as a modification of the formula of the *Deut. Dest. Zeit.* First make grenadine essence, as follows:

|                              |           |
|------------------------------|-----------|
| Oil of sweet orange.....     | 3 parts   |
| Oil of clove.....            | 1 part    |
| Tincture of vanilla.....     | 15 parts  |
| Tincture of ginger.....      | 10 parts  |
| Maraschino liquor.....       | 150 parts |
| Tincture of coctionella..... | 165 parts |
| Distilled water.....         | 150 parts |
| Phosphoric acid, dilute..... | 46 parts  |
| Alcohol, 95°.....            | 820 parts |

Mix and dissolve.

To make the syrup, add 1 part of the essence to 50 parts of simple syrup, and dissolve in the mixture 1 part of citric acid.

**The Drug Journals of the United States.**—L. W. M., Mo., requests us to publish a list of the drug journals published in the United States.

The list given below is compiled from the exchange list of the *AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD* as follows:

*American Journal of Pharmacy*, Philadelphia, Pa.; *Deutsch-Amerikanische Apotheker Zeitung*, New York, N. Y.; *Merck's Market Report and Pharmaceutical Journal*, New York, N. Y.; *Meyers Bros' Druggist*, St. Louis, Mo.; *Notes on New Remedies*, New York, N. Y.; *The Apothecary*, Chicago, Ill.; *The Bulletin of Pharmacy*, Detroit, Mich.; *The Druggists Circular and Chemical Gazette*, New York, N. Y.; *The Drugman*, Nashville, Tenn.; *The Graduate*, Chicago, Ill.; *The Indiana Pharmacist*, Indianapolis, Ind.; *The National Druggist*, St. Louis, Mo.; *The New England Druggist*, Boston, Mass.; *The Pacific Druggist*, San Francisco, Cal.; *The Pacific Drug Review*, Portland, Ore.; *The Western Drug Record*, Kansas City, Mo.; *The Western Druggist*, Chicago, Ill.,

**Intensifying Negatives.**—G. A. S., Lowville, N. Y.—Plates which require intensification are treated to a bath of bichloride of mercury in watery solution followed by similar solutions of chloride of ammonia, and sulphite of soda, as follow:

|                             |           |
|-----------------------------|-----------|
| Hydrarg. chlor. corros..... | 1.        |
| Ammon. chlor. ss.....       | grs. 240  |
| Aqua destillata.....        | fl. 3 xx  |
| Ammon. chlorid.....         | 3 i       |
| Aqua destillata.....        | fl. 3 xx  |
| Sodii sulphit.....          | 3 i       |
| Aqua destillata.....        | fl. 3 ix. |

Immerse the plate in solution No. 1 allowing the fluid to flow evenly over it until the negative becomes white; then drain the plate and immerse it for one minute in solution No. 2; wash off and pour over or immerse in No. 3 until changed entirely to a dark brown or black. A weak solution of iodide of potassium and hyposulphite of soda may be used in place of the chloride of ammonium in solution No. 2.

**Diarrhoea Mixtures.**—R. Klemm, Brooklyn, N. Y.—The apothecaries attached to the different city hospitals keep in stock what is termed a "house mixture." At "Roosevelt" "chalk and catechu mixture," composed as follows, is used in the treatment of ordinary attacks of diarrhoea:

## CHALK AND CATECHU MIXTURE.

|  |             |
|--|-------------|
| Tincture of opium.....                           | 7½ minims   |
| Chalk mixture.....                               | 1 fl. dram  |
| Compound tincture of catechu enough to make..... | 2 fl. drams |

In the Department of Public Charities and Correction, (Bellevue and the City Hospital) the formulas given below are in constant employment:

## SUN DIARRHŒA MIXTURE.

|   |  |
|---|--|
| Tincture of opium.....                        |  |
| Tincture of capsicum.....                     |  |
| Tincture of rhubarb.....                      |  |
| Spirit of camphor.....                        |  |
| Spirit of peppermint, each equal volumes..... |  |

Mix and filter; dose, 3 i.

## LOOMIS' DIARRHŒA MIXTURE.

|  |                |
|--|----------------|
| Tincture of opium.....                             | ¼ fluid ounce  |
| Tincture of rhubarb.....                           | ¼ fluid ounce  |
| Compound tincture of catechu (U. S. P.).....       | 1 fluid ounce  |
| Oil of sassafras.....                              | 20 minims      |
| Compound tincture of lavender, enough to make..... | 4 fluid ounces |

Mix; dose, 3 j.

## SQUIBB'S DIARRHŒA MIXTURE.

|                              |                |
|------------------------------|----------------|
| Tincture of opium.....       | ¼ fluid ounce  |
| Tincture of capsicum.....    | 1 fluid ounce  |
| Spirit of camphor.....       | 1 fluid ounce  |
| Purified chloroform.....     | 180 minims     |
| Alcohol, enough to make..... | 5 fluid ounces |

Mix; dose, 3 ss to 3 j.

Where bismuth is indicated the following finds favor:

## COMPOUND BISMUTH MIXTURE.

|                                    |              |
|------------------------------------|--------------|
| Subnitrate of bismuth.....         | ½ ounce      |
| Camphorated tincture of opium..... | ¼ fl. ounce  |
| Chalk mixture, enough to make..... | 4 fl. ounces |

Mix; dose, 3 ii.

**Mercurial Ointment.**—"Ungt.," Brooklyn, N. Y.—"Calomel is decomposed by the addition of solution of potassa and the precipitate formed after being washed and dried is mixed with lard to form mercurial ointment. Can you give me a formula? I saw the ointment made in this way once, but was unable to obtain particulars. As to whether this will form a true ointment of mercury, I cannot tell; if it does it is a superior method to the one formerly in use."

An ointment corresponding to the mercurial ointment of the U. S. Pharmacopœia cannot be prepared according to the method described by our correspondent, owing to the simple fact that the precipitate produced on adding solution of potassa to mercurous chloride is not metallic mercury, but an oxide of the metal. The mercury in mercurial ointment exists in it in a state of minute division and not of chemical combination, as is erroneously supposed by many persons. That a certain amount of the metal becomes oxidized in the process of preparing the ointment, it is not questioned, but

the proportion is trifling, seldom amounting to more than one per cent. It has been shown that an ointment made by merely mixing lard and black oxide of mercury does not possess the same therapeutic properties as the simple combination of lard with metallic mercury.

**Cement for Pestles.**—F. L. D., Mo., requests a formula for cement to fasten wedgewood pestle handle.

Try the following :

|                       |           |
|-----------------------|-----------|
| Rosin.....            | 180 parts |
| Burnt amber.....      | 30 parts  |
| Calcined plaster..... | 15 parts  |
| Boiled oil.....       | 8 parts   |

Melt the rosin over a slow fire and incorporate the remaining ingredients, adding the oil first.

**Modene.**—J. A. C., Ohio, asks if we have ever published a formula for the compound bearing this name. We have not, but judging from reports we have had regarding the substance, it cannot possess much potency. We should regard it as one of the numerous army of preparations which are best tested before being purchased. It is almost an impossibility to prepare a liquid hair remover or depilatory which will accomplish its end without seriously interfering with the condition of the skin.

**Removal of Hydrastin Stain.**—C. S. B., New York.—Our correspondent has stained a light colored coat with a mixture containing hydrastin or ebrberine, and wishes to know how he should proceed to remove the spot.

The berberine is the probable cause of the stain, and to remove it we would suggest the application of a dilute acid solution, preferably acetic acid, followed by the application of warm chlorine water, which in turn should be washed away with plenty of plain water.

**Wine Presses.**—J. F. B., South Carolina, requests the name and address of manufacturers of wine presses for making small quantities of wine.

Apparatus of that description can be obtained from J. L. Haden & Co., Cincinnati, O., and A. B. Farquhar & Co., 77 Cotton Exchange, New York.

**Corn Cures.**—F. H. Conn. desires formulas for liquid and Russian corn cures.

#### LIQUID CORN CURE.

|                     |       |
|---------------------|-------|
| Caustic potash..... | 3i    |
| Alcohol.....        | f. 3i |

Dissolve.

Moisten the corn with the solution which will gradually remove the hardened integument and cause the corn to disappear without pain.

#### RUSSIAN CORN CURE.

|                                 |            |
|---------------------------------|------------|
| Salicylic acid.....             | 30 grains  |
| Extract of Indian cannabis..... | 5 grains   |
| Collodion.....                  | 240 grains |
| Alcohol.....                    | q. s.      |

Dissolve the extract of Indian hemp in a few drops of alcohol, then add the solution to the collodion, in which the acid had been previously dissolved.

**Corn Salve.**—J. C. D., Penna.—The following, which is accounted excellent, is credited to C. W. Moister.

#### CORN SALVE.

|                        |           |
|------------------------|-----------|
| Yellow wax.....        | 6 ounces  |
| Venice turpentine..... | 1/2 ounce |
| Pure resin.....        | 1/2 ounce |
| Salicylic acid.....    | 1/2 ounce |
| Balm of Peru.....      | 1/2 ounce |
| Petroleum.....         | 1 ounce   |

Melt over a water bath. Stir until cool.

"Hanson's Magic Corn Cure," about which you inquire, is said to have the following composition :

|                     |         |
|---------------------|---------|
| Simple cerate.....  | 1 ounce |
| Salicylic acid..... | 1 dram  |

**Colored Fires.**—N. L. W., New York.—The formulas about which you inquire appeared in the *Pharmaceutical Record*, June 16, 1892. From these we make the following selection :

#### WHITE FIRE.

|                       |           |
|-----------------------|-----------|
| Potassi nitrate.....  | 8 ounces  |
| Charcoal.....         | 1/2 ounce |
| Shellac (coarse)..... | 2 ounces  |

#### BLUE FIRE.

|                                      |       |
|--------------------------------------|-------|
| Potass. nitrate.....                 | 8 oz. |
| Antimony sulphide.....               | 4 oz. |
| Zinc (metallic, in fine powder)..... | 2 oz. |

#### RED FIRE.

|                        |       |
|------------------------|-------|
| Strontium nitrate..... | 8 oz. |
| Potass. chlorate.....  | 2 oz. |
| Shellac (coarse).....  | 2 oz. |

#### ROSE FIRE.

|                      |         |
|----------------------|---------|
| Potass. nitrate..... | 8 oz.   |
| Corn meal.....       | 2 oz.   |
| Charcoal.....        | 1/2 oz. |

#### VIOLET FIRE.

|                       |         |
|-----------------------|---------|
| Potass. nitrate.....  | 3 oz.   |
| Potass. chlorate..... | 3 oz.   |
| Shellac.....          | 2 oz.   |
| Chalk.....            | 2 oz.   |
| Charcoal.....         | 1/2 oz. |

#### GREEN FIRE.

|                       |       |
|-----------------------|-------|
| Barium nitrate.....   | 6 oz. |
| Potass. chlorate..... | 1 oz. |
| Shellac (coarse)..... | 2 oz. |

## Bibliography.

**THE MANUFACTURE OF LIQUORS AND PRESERVES.**—Translated from the French of J. De Brevans, Chief Chemist of the Municipal Laboratory of Paris. With sixty-five illustrations, \$3. New York : Munn & Co., 1893.

The people of France have always excelled those of other nations in the concoction of palatable essences and *liqueurs* and France may without undue exaggeration be said to be the home of the more noted of this class of aromatic compounds. Their manufacture is indeed an industry of no mean proportions, which with the conservation of fruits gives employment to a large number of people.

The work before us has been compiled for Frenchmen by a Frenchman and the author has confined himself almost wholly to the methods and apparatus used in his native country, with reference to the operations of distilling, extraction of essences, the manufacture of aromatic wines and hydromels as well as the detection of adulterations and the analysis of alcohols, sugars and syrups. Although this limitation of field as to source of information regarding formulas, apparatus, etc., tends to circumscribe the author's views and to render the book almost provincial in its tone and scope, the work is nevertheless one of much value and well calculated to serve as a guide to the preparation of the numerous compounds which receive mention in its pages.

Although the compilation is intended primarily for liquor manufacturers, the formulas given for the various fruit syrups, sugars, essences, aromatic waters and artificial liquors will prove of great value to druggists and confectioners and should replace to a great extent many of the hastily compiled and inferior manuals which have appeared in recent years to the affliction and disappointment of unsuspecting purchasers. With this explanation we unhesitatingly commend the work to all who are interested in the preservation of fruits and the production of fruit syrups.

The book contains a preface by Ch. Girard, Director of the Municipal Laboratory of Paris, and is embellished with sixty-five illustrations, of which the greater number are figures of machinery and apparatus used

in the manufacture of alcoholic preparations and syrups, the remainder being descriptions of the various aromatic plants which find mention throughout the work.

### MISCELLANEOUS FORMULAS.

#### BOUGIES FOR INCIPIENT GONORRŒHA.

[M. WESER, *Sem. Med.*]

|                           |             |
|---------------------------|-------------|
| Gum arabic in powder..... | 15 pts.     |
| Lactose.....              | 5 pts.      |
| Glycerin.....             | 1 pt.       |
| Iodoform.....             | 2 to 4 pts. |

Make ten bougies 13 cm. long.

#### EFFERVESCENT IRON LACTATE.

[P. CESARIS *Bollet Chim. Farm.*]

|                         |            |
|-------------------------|------------|
| Iron lactate.....       | 20 grammes |
| Citric acid.....        | 40 grammes |
| Sodium bicarbonate..... | 80 grammes |
| White sugar.....        | 30 grammes |

Heat the mixed powders in a water bath to 100° C when the whole will swell up and assume a fine granular form. The preparation is very hygroscopic and should therefore be preserved in air-tight receptacles. The taste is very agreeable.

#### GLYCERIN SUPPOSITORIES.

[D. BON, *Giornale farmaceutico Trentino.*]

|               |            |
|---------------|------------|
| Glycerin..... | to grammes |
| Water.....    | 5 grammes  |
| Gelatin.....  | 1 gramme   |

Melt by a gentle heat and pour into molds. When cold dip into a mixture of melted cacao butter and white wax.

#### TEETHING SYRUP.

(*Chemist and Druggist.*)

|                     |       |
|---------------------|-------|
| Ol. anethi.....     | mviij |
| Sp. am. co.....     | 3 ss  |
| Mag. carb.....      | 3 j   |
| Aq.....             | 3 iv  |
| Filter and add—     |       |
| Sod. brom.....      | 9 iss |
| Pot. bicarb.....    | 3 ss  |
| Tr. card. co.....   | 3 s   |
| Syr. rhead. ad..... | 3 vj  |

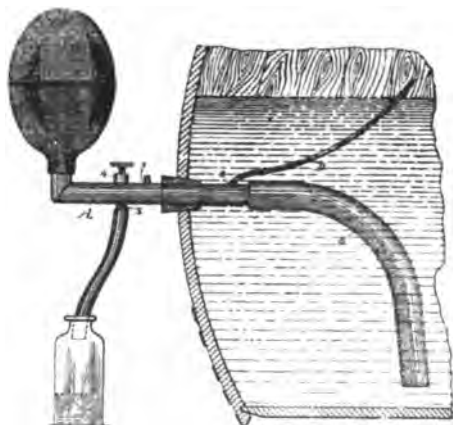
Under six months  $\frac{1}{2}$  teaspoonful; above six months 1 teaspoonful.

### Novelties and New Inventions.

Under this heading we will be pleased to insert, free of charge, a description and illustration of novelties and new inventions of interest to the drug trade.

#### Bottle-filling Device.

Joseph H. Stallings, of New Orleans, La., has patented the bottle-filling device shown herewith, the abstract of specifications reading as follows:



Claim.—1. A filling-device comprising a main tube

formed with an outlet pipe, a collapsible bulb on the outer end of the main tube, a valve to close the outlet pipe, a flexible tube on the inner end of the main tube an air-pipe in the main tube and extending upward at the inner portion thereof, and a packing around the main tube behind the outer open end of the air-pipe, all combined and arranged as set forth.

2. A filling-device comprising a main tube formed with an outlet pipe, a valve to close the outlet pipe, a flexible tube on the end of the outlet pipe, an air-bulb on the outer end of the main tube, a flexible tube on the inner end of the main tube, an air-pipe opening through the main tube and extending upward and rearward, and a packing around the main tube behind the outer open end of the air-pipe, all as set forth.

#### A Practical Way of Making a Decoction.

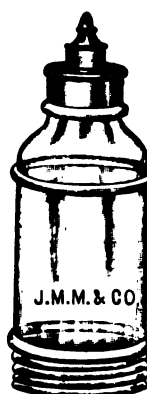
In a paper read by S. F. Hughes, Ph.G., at the semi-annual meeting of the California Pharmaceutical Society, San Francisco, attention was called to a coffee pot, patented by N. D. Sickles, of San Francisco, as a capital apparatus for making a decoction, in a quick, clean and handy way. After experimenting with it, he finds it works like a charm. This pot, as



the cut shows, can be made of granite ironware, which is much better for pharmaceutical work than tin.

Place drug in hopper, and water in compartment A; then place on stove, and when heated, menstium will move up to F and flow through drug.

#### A Perfected Tooth Powder Bottle.



The accompanying cut illustrates an improved form for tooth powder bottles that must at once commend itself to every practical pharmacist. The bottle was introduced some months since by John M. Maris & Co., of Philadelphia, and a patent applied for, but it is only quite recently that the invention has been so perfected that it could be placed on the market.

The nickel-plated screw cap and bottom give the bottle a very attractive appearance, the latter feature being particularly useful as well as ornamental. The bottom is of spring brass and when pressed by the finger the powder is thrown out.

When empty the screw bottom can be removed and the bottle filled with ease and dispatch.

*Written for the American Druggist and Pharmaceutical Record.*

## TIPS ON ADVERTISING. IX.

### The Three-Cornered Store in General.

(And One in Particular.)

BY EDWARD A. HAY,

Of H. H. Hay & Son, Portland, Me.

The lack of any attempt at plan in laying out many of the older cities, as well as the intentional design of some of the modern ones, brings two streets together at less than a right angle. This fact is accountable for the odd-shaped junction-corners, flat iron stores, heaters, three-cornered stores, as they are variously termed. Their conspicuous position, frequently at

The transient or occasional distant resident customer puts no effort into remembering your store apart from all others in your vicinity. Exterior shape is bound to impress, and if by unique attractive arrangement you make that impression favorable inside, much of the desired end is attained.

Another advantage is the available amount of space for window display and sign boards, the principal street serving as front with more windows, the other street with its extra burden of signs.

One more point is the greater field for patronage by reason of the more roads leading to the Rome of your ambition. At all times lay much stress on the shape of your store as an aid to location.

I would not make a plea for all druggists to rush for such locations, for I believe every man will enjoy more comfort if his store has four good square corners and the floor space allotted to such.



SPONGE WEEK AT H. H. HAY & SON'S, PORTLAND, ME.—THE WINDOW.

the confluence of several streets, and their resemblance many times, with modern plate glass, to a huge show case, makes them quite desirable as drug stores. A prominent location has so much to do with the business of a pharmacy.

Any one who has considered for a moment their odd shape can but conceive the difficulties that confront the man fitting and arranging such a store. Everything planned to lighten the burdens of the caterer to men's comfort and pain easing, must be specially fitted to the odd shape. The counters, the shelving, even the decoration of the ceiling or the tiling of the floor must be in pattern to harmonize.

In spite of these facts, few cities are without these three-cornered drug stores. Hence such places must have advantages as well. Let us look for a few of them.

First we have individuality.

To those who have been so fortunate or unfortunate, as to cast their lot on a triangle, the following description of our store, though not a model in arrangement, may prove of interest. This store was fitted for its present use some forty years ago and has since had little of the radical change that would make it a model modern store. Still it serves its purpose to a fair degree and fulfils the needs as well as many more expensively equipped establishments.

In the arrangement shown in the diagram, there would at first seem to be little of the order usually observed in a pharmacy. On a second look you will see that the soda counter and cigar case are convenient to the doors and as remote from the prescription counter as possible. The prescription counter is partly screened by the brush cases in front and still is accessible to those necessary adjuncts, the sink room, the pill and chemical cases, and has a fine light from the show

window at the side. In the sink room will be noticed a dumb waiter. This communicates with the laboratory above and the cellar below, giving ready access to those important bases of supply.

The other corner is given over to general dispensing of drugs, perfumes and sundries. The patent medicine stock is mostly above the shelf ware, around the whole store, thus utilizing this waste space. The cramped quarters make thorough display of goods impossible, but this is in a measure compensated for by a systematic and seasonable weekly rotation of window displays. One of the recent attempts in this line was two weeks devoted to sponges. The illustrations give a good idea of the general effect, but a few words may make clearer the subject.

ing in odd numbers and conspicuous. A tank of gold fish here offered an attraction to the indifferent passer.

The large end window was devoted to carriage and stable sponges and chamois, the unbleached and tougher sorts.

The inside of the store was festooned with sponges and in fact it was very suggestive of the sea for a time.

Our advertisements in the papers in the meantime dwelt on the same theme, with a change at the end of the week and a reading notice at the same time, calling the attention of the public to the display.

Sponge week was followed by soap week, all windows bearing that article classified in a similar way.



SPONGE WEEK AT H. H. HAYS & SON'S, PORTLAND, ME.—INTERIOR.

The first window contained some sea curiosities such as sea fans, sea ferns, corals, shells, loofahs and small toilet sponges. The last two were festooned and draped above the following sign, helping to attract attention:

**FLOWERS**  
From Neptune's Garden.

The next window was devoted to the better grade of bath sponges and bathing brushes, sponge bags and bathers' supplies.

The third window contained the bargain grades of sponges marked in dry goods store style, the price be-

1. The several varieties of castile soaps.
2. The fine toilet soaps.
3. 5 cent and 10 cent varieties of the bargain sort.
4. Medicinal and disinfecting soaps.

A thorough display of one article at a time seems to impress the public and leads to a steady demand for the articles shown, even when withdrawn from prominence.

Trusting some other dispensers in three-cornered stores may find comfort in our sympathy for them, we shall hope to hear of their success in drawing attention of the drug-seeking public to their abodes.

*Written for the American Druggist and Pharmaceutical Record.*

### Pharmaceutical Advertising.

By WM. B. LILLARD.

In my several articles as to the profits in the retail drug business, I found in collecting statistics for the information in them, the same story was told by nearly every pharmacist, "that there was no way to increase the regular drug business, it was surely regulated by the demand, that the public would not buy medicine, no

The original was without the cut.



## MESSRS. SORRELLS & CARR, OF THE PARLOR DRUG STORE

Want every Little Girl in the city to bring her Doll to the Parlor Drug Store, between August 15 and September 1. The dolls to be placed in the store window on exhibition, and to stay for one week after September 1.

They will give a cash prize of Five Dollars to the prettiest dressed doll. To the second, Three Dollars; to the third, Two Dollars; and to the fourth, One Dollar.

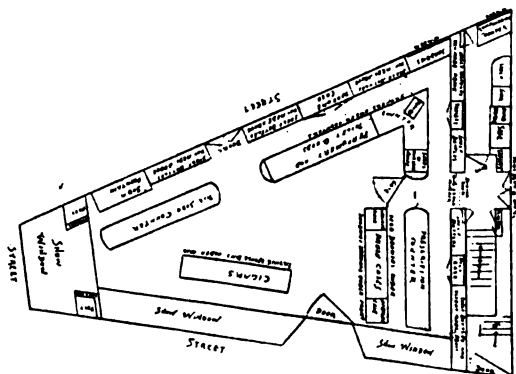
For the first hundred Dolls brought to the store, they will give a bottle of perfume free to each little girl.

No names must be placed on the dolls in any way, as each Doll will be numbered and a corresponding number will be given to the owner of the Doll. So there will be no trouble for each owner to get her doll.

On September 7, the Prizes will be awarded, and the Dolls winning the prizes must stay until September 15.

matter at what price it was sold, except it was wanted for immediate use." But after a careful investigation I found that the average drug store sold nearly half its goods by the advertisements of the manufacturers. If the pharmacist by distributing the advertising matter for the various wholesale makers creates a business for them as well as for himself, why would it not pay him to create a business for himself without giving the larger per cent. of the profits to others? I don't mean that I would suggest that he put up or have put up for him a full line of patents, but keep and advertise his novelties in the sundry department. No department of the business pays as good a profit, yet the average sale of sundries will not equal 12 per cent. of the actual

business. If there is any way to increase the only part of the business which is profitable, surely advertising will do it. There are so many different ways of advertising that each one will have to be guided by his own



PLAN OF THE THREE-CORNERED DRUG STORE.  
OF H. H. HAY & SON, PORTLAND, ME.

judgment. There is no reason why novelties in advertising should not be successfully carried out by the pharmacist. Among the several novelties in pharmaceutical

## 3 POINTS

for a **SPONGE** buyer  
to regard.

APPEARANCE

DURABILITY

PRICE

We can satisfy you  
on all three.

**H. H. HAY & SON,**  
Middle Street.

advertisements, and quite successful ones, was the one of Messrs. Sorrells & Carr. I suggested the idea and have never heard of its being used by any other firm.

### Sponge Week.

Every year at about this season, when the dust is beginning to fly, H. H. Hay & Son make it their custom to show what their sponge stock is like. Everyone should be interested in this universal agent of cleanliness, as it may be seen in their windows just now.  
A "Reader."

Another plan would be to ask for original designs in sachet bags, and offer a reasonable remuneration for the designs selected. Window displays are good mediums also.

# COLUMBIAN EXPOSITION

## Notes of General Interest.

(From our Special Correspondent.)

So much has been said and written in the newspapers and elsewhere of the grand Exposition holding sway at the inland commercial center of this country that but little remains for trade and professional journals except to mention and describe those exhibits of special interest to their clientele.

Inasmuch as many persons will visit Chicago who are utter or comparative strangers to "the city by the lake," a few words with reference to the city and to the Fair in general will not be amiss. All who intend visiting the Fair should decide at once when they will go, how long they will remain, and how many will accompany them, and then should immediately make arrangements accordingly either through the AMERICAN DRUGGIST World's Fair Club, or with some one located in Chicago, a personal friend, or some pharmacist who will do this service gratis, as Henry Biroth, local secretary of the American Pharmaceutical Association, at the Schiller Building, or C. H. Bangs, at the Merck Building, in the World's Fair grounds. Good rooms may be had at as low a price as \$1.00 per person per day.

### ACCOMMODATIONS.

The quarters chosen should be selected in that district known as the "south side," or in Englewood, Hyde Park, Grand Crossing or even in South Chicago. All of these localities connect easily with the Exposition grounds by means of boats plying in Lake Michigan, by elevated, cable and electric cars, and are now so plentifully supplied with hotels that apartments can be secured without any difficulty whatever. As stated, however, it is advisable to secure quarters in advance for a certain specified period and to pay a deposit, obtaining therefor a receipt indicating exactly the period for which the apartments are rented.

Meals may be obtained both within, and without the Fair grounds, at rates which are quite reasonable for a great city.

### THE FIRST GLIMPSE.

From whatever direction the visitor approaches the Fair grounds, a number of domes in the distance announce proximity to the Exposition. Of these the tallest as well as the finest is that of the Administration Building. This is beautifully gilded and strung with a great number of incandescents and both day and night immediately commands attention. [See letter E in heading].

The portion of the Exposition which attracts attention at the greatest distance is the great Ferris Wheel, which rises in its oddity to a distance of 260 feet above the ground. The other

portion of the Exposition which attracts attention above all other objects is the gigantic Manufactures and Liberal Arts Building, which is one-third of a mile long and about one-half as broad and covers more area than any other single building in the world. In this building are located the principal exhibits of interest to the members of the pharmaceutical profession.



C. O. Rano.

C. O. Rano, who was enthusiastically elected president of the New York State Pharmaceutical Association at the recent meeting at Lakewood, was born in Genesee County in this State in 1848. Mr. Rano is a pharmacist of wide experience, having practiced his calling in New York City, Detroit, Kansas City and Buffalo, where he located permanently in 1872.

Having graduated from the College of Pharmacy of the City of New York, he was in a position to profit by his experience, and when he settled in Buffalo soon took a leading stand among the pharmacists of Erie County. In 1881 he took an active part in the organization of the Erie County Pharmaceutical Association, one of the most efficient and active local organizations of pharmacists in the United States. He has been president of this association several terms.

He was elected Secretary of the Erie County Board of Pharmacy at its organization on May 28, 1884, which office he has continued to fill down to the present to the eminent satisfaction of the pharmacists of that district.

In 1866 Mr. Rano became a member of the A. P. A., and at the last meeting was appointed a member of the committee on trade interests. He has also been chairman of the same committee in the New York State Association for the past two years.

His business career has been prosperous, his social life a success, and his family, embracing a charming wife with children just verging into man and woman hood, is a most interesting one.

With such a leader great things may be hoped for from the State Association.

The other exhibits of special interest to pharmacists are located in the Agricultural, Horticultural, Forestry and Mines and Mining Buildings, while some exhibits of interest are distributed throughout the other buildings and will be described in due course.

The visiting pharmacist will desire to view the products of nature, of the soil, earth and waters, first, and such occur principally, as one would readily suppose, in the Horticultural, Agricultural, Forestry and Mines and Mining Buildings, reserving the manufactured products for the last.

With this plan in mind, the visitor will first enter either the Horticultural or the Agricultural departments. With an eye to the beautiful as well as the useful, he will enter the former.

### Horticultural Building.

This building is about 1,000 feet long, divided, as far as the present purpose is concerned, into four parts, beginning at the north end, as follows: Seed, plants, fruits and wines. The building is therefore not devoted exclusively to natural products, but it is best to proceed in the manner specified.

Entering at the north end of the building, the visitor will see an array of exhibits consisting largely of flower seeds. On one side at the extreme north end is a small exhibit of medicinal plant parts by Moser, of Versailles, France. These are in open tin cans with slips of light brown paper upon them bearing the names with some other inscriptions, some of the latter being quite curious. The names of the drugs with the remarks are:

Walnut leaves—highly recommended to ladies; black currant leaves—makes a very good drink; centaury—the tops with flowers; veronica; leaves of pansies; gentian root; absinthe leaves; red vine leaves—used as a tea by ladies of a certain age; pectoral flowers—a mixture; mallow flowers—used as a tea against indigestion; eucalyptus; flowers of linden tree—a good tea for indigestion; scabious; digitalis; ground ivy; maté.

The latter appears in several forms, as a powder, the leaves somewhat broken, and also broken into rather fine particles. More attention is paid to it and a little notice over the container reads as follows:

Maté or Brazilian tea; has been adopted by the blue cross temperance society as a daily drink; also used by the French army; is used for preparing cordials, ice cream, custards, candies, etc.

Just above the open container is a hide bag packed with the drug, this being the manner in which the latter is exported from South America. These drugs are fairly good specimens, but unfortunately the exhibit is not artistically displayed.

Near the southern end of the seed court is the pavilion of Smith & Painter, of New Jersey, containing various extracts for fountain purposes, viz., sarsaparilla, soluble

# American Druggist and Pharmaceutical Record.

A JOURNAL OF PRACTICAL PHARMACY.

VOL. XXIII. No. 5.

NEW YORK, AUG. 3, 1893.

WHOLE No. 258.

## AMERICAN DRUGGIST PUBLISHING COMPANY.

37 COLLEGE PLACE, NEW YORK.

A. R. ELLIOTT, PRESIDENT.

|  |        |
|--|--------|
| Subscription Price—For the United States and Canada, - | \$2.00 |
| If paid in advance direct to this office, -            | 1.50   |
| "    "    for Foreign Countries, - - -                 | 2.50   |
| Single Copies, - - - - -                               | .15    |

The "American Druggist and Pharmaceutical Record" is issued on Thursday of each week. Changes of advertisements and all copy for publication should be received before Tuesday of each week.

We are not responsible for any money paid to agents. All remittances should be made direct to this office. Express Orders, Post-Office Orders and Drafts on New York should be made payable to the "American Druggist Publishing Company" and addressed to them at 37 College Place, New York.

*Liberal Commissions to Old Agents.*

### TO THE BUYER—CONFIDENTIAL.

**D**O you buy closely? If not you cannot hope to succeed in times of financial stringency such as we are now passing through. Well bought is half sold. If you do not study our weekly market you are neglecting most valuable opportunities. Not only read it, but study it and act upon the information therein contained.

You cannot buy one-pound lots of any drug at the prices there quoted, but these prices, when rightly used, will give you a key to the situation.

This journal is the only one going to the retail drug trade that is not *afraid* to give actual bottom prices for drugs. We give you this information. Use it and you will find that this feature of the paper alone saves you hundreds of dollars every year; neglect it and you will find it harder and harder to meet your bills. Here is what some of our readers say about it. Follow their example and let us hear from you.

I have observed with much pleasure the steady growth and improvement in the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD and wish to express my appreciation of the great value of the paper to me: I have saved many times the cost of my subscription by following your admirable market report closely. In fact, I do not know what I would do without it. *C. A. Swenson, Jamestown, N. Y.*

We can't very well get along without your valuable journal. Your weekly market report eclipses anything that comes to our sanctum.—*M. D. Green & Co., Brownsburg, Ind*

Enclosed find amount of subscription to your excellent journal. I cannot do without it.—*Thos. Tomlinson, Ph.G., Bellaire, O.*

### THE STATE OF TRADE.

**T**HE theories advanced as accounting for the great financial depression are as varied as the writers on this topic are numerous, and all seem to be more or less the expression of a certain degree of local or personal interest. The Eastern capitalists are practically unanimous in attributing it to the operation of the Sherman silver act; the Western miners say that act was not liberal enough to avert the trouble; the Northern manufacturers assert that it is the prospects of "tariff tinkering" that unsettles trade, and the Southern planter is just as certain that the present unfavorable condition of commerce is a direct and logical consequence of years of an unfair protective tariff.

To all of these it may be pointed out that America is not the only sufferer but rather the last of the nations to feel severely a depression which has been most marked on the European continent. There are, at present, indications that whatever may have been the contributing causes the crisis is past and commerce is on gaining ground. Europe has been a heavy purchaser of American stocks and bonds at the very low rates recently ruling and the tendering of bills of exchange in payment of these purchases has so lowered the rate of London exchange as to render it profitable to import gold. The stream of gold once set in this way will quite likely continue, as it will soon be needed to pay for our exports of cotton and cereals, both of which crops promise to turn out well.

### TO THE COLUMBIAN EXPOSITION.

**T**HE schedule of the special A. P. A. excursion from Boston, New York, Philadelphia, Baltimore, Washington and intermediate points has been slightly modified since the issuance of the committee's circular and reads now as follows:

Leave Boston and the East as convenient, by boat or rail, stop-over privilege in New York, fare B. & O. \$30.40. Via Maine Central and Montreal \$29.60.

Leave New York (fare \$26), Liberty street, Friday, August 11, at 11 P.M.; arrive in Washington the 12th, at 6.30 A.M. Breakfast and lunch at Ebbitt House 75c. each. Leave Philadelphia per special sleeper on regular train Chestnut and Twenty-fourth streets, August 12, at 8.15 A.M., Wilmington, 8.45 A.M., and Baltimore (fare \$26) at 10.30, arriving at Washington at 11.35 Saturday. The whole party will leave at 1 P.M., arriving in Chicago on Sunday afternoon.

A large number of representative pharmacists from New England, New York, New Jersey, Philadelphia and Baltimore have already decided to go.

## Eligible Toilet Articles.\*

BY FRANK EDEL, PH.G.

If an account were kept of the sale of toilet articles, it would be found that the same constitutes quite a considerable part of the general sales of a well-stocked pharmacy. While the profits are good in this line of goods, there is no question but that they can be vastly increased by the pharmacist pushing his own line of goods, for the following reasons: 1st, because if he creates a sale in his own line (which he can, if his goods are first-class), he makes himself independent of the cutter and the drygoods stores. 2d, by creating a demand for the goods under his own name, he not only makes their sale more profitable, but he adds other sales, created by people coming to his store after these goods.

I do not quite believe that it would be profitable for an ordinary pharmacist to prepare his own perfumery; but I do believe that he can find profit and reputation in putting up a line of face and toilet powders, hair tonics, toilet cream, tooth powder, and tooth paste, cologne water, Florida water, and toilet water. These can be easily made; and if properly put up, will find a ready sale.

Some years ago I bought an engraved half-gallon jar, and had the words "Perfumed Prepared Chalk" engraved on the same. This was placed upon the counter, and filled with prepared chalk perfumed with oil of cologne. The sale of the article was astonishing. Again, I bought a gallon-tincture bottle, of nice design, with a large floral label marked "Improved Toilet Cream." This was placed in a prominent place on the counter, and created a good demand for the cream. This only serves to illustrate how easily a demand can be made for these goods, if the pharmacist has good formulas and puts them up in nice shape. All the formulas given below have been tried by the writer, and been found excellent.

## HAIR TONIC

An article frequently called for is a hair tonic. For preparing such, the following formulas will be found perfectly satisfactory:

|                           |                           |           |
|---------------------------|---------------------------|-----------|
| Cologne.....              | 2 fl. oz.                 | 60 c.c.   |
| Quinine sulphate.....     | 15 grs.                   | 1 gm.     |
| Tincture cantharides..... | 3 fl. dra.                | 11 c.c.   |
| Borax.....                | 1 dr.                     | 4 gms.    |
| Ammonia water.....        | 1 fl. dr.                 | 3.75 c.c. |
| Glycerin.....             | 3 fl. oz.                 | 90 c.c.   |
| Tincture cudbear.....     | enough to color           |           |
| Alcohol.....              | 6 fl. oz.                 | 178 c.c.  |
| Water.....                | enough to make 16 fl. oz. | 473 c.c.  |

Or the following:

|                           |                     |           |
|---------------------------|---------------------|-----------|
| Powdered borax.....       | 2 drs.              | 8 gms.    |
| Tincture cantharides..... | 1/2 fl. oz.         | 15 c.c.   |
| Ammonia water.....        | 1 fl. dr.           | 3.75 c.c. |
| Cologne.....              | 1 fl. oz.           | 30 c.c.   |
| Glycerin.....             | 2 fl. oz.           | 60 c.c.   |
| Alcohol.....              | 3 fl. oz.           | 90 c.c.   |
| Sage infusion.....        | q. s. ad 16 fl. oz. | 473 c.c.  |

These preparations are first-class for the purposes intended.

## DANDRUFF CURE.

For preparing a dandruff cure, the following will be found efficient:

|                      |                     |          |
|----------------------|---------------------|----------|
| Resorcin.....        | 3 drs.              | 12 gms.  |
| Glycerin.....        | 2 fl. oz.           | 60 c.c.  |
| Alcohol.....         | 3 fl. oz.           | 90 c.c.  |
| Rose water.....      | 6 fl. oz.           | 177 c.c. |
| Distilled water..... | q. s. ad 16 fl. oz. | 473 c.c. |

## NAIL POWDER.

For a polishing powder for the finger nails, the following is submitted:

|                            |                 |         |
|----------------------------|-----------------|---------|
| Powdered tin peroxide..... | 1 oz.           | 30 gms. |
| Carminc.....               | enough to color |         |

\* From *Merck's Market Report*.

or:

|                            |                 |         |
|----------------------------|-----------------|---------|
| Powdered zinc oxide.....   | of each 1/2 oz. | 15 gms. |
| Powdered tin peroxide..... |                 |         |
| Carminc.....               | enough to color |         |

If a paste is desired the following is recommended:

|                 |           |         |
|-----------------|-----------|---------|
| Tin oleate..... | 2 fl. oz. | 60 c.c. |
|-----------------|-----------|---------|

Make of suitable consistency by incorporating tin peroxide. These may be perfumed, if desired, with oil of rose or cologne.

## TOILET POWDERS.

The French chalk of the *National Formulary* will be found an excellent toilet powder, and can be used plain or with one per cent. of powdered boric acid incorporated, and perfumed with oil of rose. The following will also be found excellent:

|                            |                       |          |
|----------------------------|-----------------------|----------|
| Powdered French chalk..... | of each 4 oz.         | 120 gms. |
| Powdered cornstarch.....   | 1/2 fl. oz.           | 15 c.c.  |
| Powdered orris-root.....   | 1/2 fl. oz.           | 15 gms.  |
| Oil cologne.....           | a sufficient quantity |          |

## TOILET CREAM.

For a toilet cream the following is recommended

|                                       |             |          |
|---------------------------------------|-------------|----------|
| Cold cream.....                       | 1/2 ounce   | 15 gms.  |
| Oil sweet almonds.....                | 1/2 fl. oz. | 15 c.c.  |
| Sodium hydrate.....                   | 18 grains   | 1.2 gms. |
| Water.....                            | 1/2 fl. oz. | 15 c.c.  |
| Mucilage quince (4 dra. to pint)..... | 12 fl. oz.  | 354 c.c. |
| Alcohol or cologne.....               | 2 fl. oz.   | 60 c.c.  |

Dissolve the soda in the water and add the oil of almonds; warm and add the cold cream. Mix thoroughly and add gradually the quince mucilage, beating them together thoroughly in order to form a nice uniform emulsion; then add the cologne (or alcohol) gradually, and agitate. Cold cream, containing in 8 ounces (240 gms.) 30 grains (2 gms.) of borax dissolved in the rose water, is the best for this purpose, making a much nicer and smoother preparation.

## COLOGNE.

|                                |              |             |
|--------------------------------|--------------|-------------|
| Oil bergamot.....              | 8 fl. oz.    | 237 c.c.    |
| Oil lemon.....                 | 6 fl. oz.    | 177 c.c.    |
| Oil cinnamon (Ceylon).....     | 1/2 fl. dra. | 9.5 c.c.    |
| Oil cloves.....                | 1/2 fl. dra. | 9.5 c.c.    |
| Oil neroli (Petale).....       | 5 fl. dra.   | 19 c.c.     |
| Alcoholic extract jasmine..... | 6 fl. dra.   | 225 c.c.    |
| Oil rosemary flowers.....      | 4 fl. oz.    | 110 c.c.    |
| Oil lavender flowers.....      | 6 fl. dra.   | 22.5 c.c.   |
| Benzol acid.....               | 160 grains   | 10.4 gms.   |
| Musk.....                      | 10 grains    | 60 ctg.     |
| Water.....                     | 1 gal.       | 3.8 liters  |
| Alcohol.....                   | 4 gals.      | 15.1 liters |

Allow to stand for a month before using. This is truly an elegant cologne.

## LAVENDER WATER.

For a lavender water, the following is recommended:

|                           |               |            |
|---------------------------|---------------|------------|
| Oil lavender flowers..... | 1 1/2 fl. oz. | 45 c.c.    |
| Oil bergamot.....         | 1/2 fl. oz.   | 15 c.c.    |
| Oil lemon.....            | 1/2 fl. oz.   | 15 c.c.    |
| Oil neroli.....           | 1/2 fl. oz.   | 15 c.c.    |
| Extract jasmine.....      | 4 fl. oz.     | 110 c.c.   |
| Extract musk.....         | 1 fl. oz.     | 30 c.c.    |
| Rose water.....           | 1 pint        | 473 c.c.   |
| Alcohol.....              | 7 pints       | 3.3 liters |

Allow to stand 3 or 4 weeks before using.

## VIOLET WATER.

The following makes an excellent violet water:

|                          |             |              |
|--------------------------|-------------|--------------|
| Extract violet.....      | 8 fl. oz.   | 237 c.c.     |
| Extract cassia.....      | 4 fl. oz.   | 110 c.c.     |
| Tincture orris root..... | 6 fl. oz.   | 177 c.c.     |
| Extract musk.....        | 1 fl. oz.   | 30 c.c.      |
| Extract rose.....        | 1 fl. oz.   | 30 c.c.      |
| Extract jasmine.....     | 1 fl. oz.   | 30 c.c.      |
| Alcohol.....             | 9 pints     | 4 1/2 liters |
| Water.....               | 1 1/2 pints | 750 c.c.     |

## FLORIDA WATER.

|                              |                        |           |
|------------------------------|------------------------|-----------|
| Oil lavender.....            | 1/2 fl. oz.            | 15 c.c.   |
| Oil bergamot.....            | 1/2 fl. oz.            | 15 c.c.   |
| Oil lemon.....               | 1/2 fl. oz.            | 15 c.c.   |
| Oil orange.....              | 1 fl. dr.              | 3.75 c.c. |
| Oil neroli.....              | 1/2 fl. oz.            | 15 c.c.   |
| Oil rose-geranium.....       | 1/2 fl. oz.            | 15 c.c.   |
| Essence musk.....            | 1 fl. oz.              | 30 c.c.   |
| Tincture tonka (1 to 9)..... | 1 fl. oz.              | 30 c.c.   |
| Tincture benzoin.....        | 1 fl. oz.              | 30 c.c.   |
| Orange flower water.....     | 4 fl. oz.              | 110 c.c.  |
| Orris root.....              | 1/2 fl. oz.            | 15 gms.   |
| Alcohol.....                 | enough to make 2 pints | 946 c.c.  |

Allow to stand a month and filter.

## FLORAL COLOGNE.

For a floral cologne, the following is excellent :

|                             |                           |
|-----------------------------|---------------------------|
| Alcohol.....                | 340 parts by vol.         |
| Extract orange flowers..... | 16 parts by vol.          |
| Extract jasmine.....        | } of each 8 parts by vol. |
| Extract rose.....           |                           |
| Tincture musk.....          |                           |
| Oil bergamot.....           |                           |
| Oil lemon.....              | } of each 5 parts by vol. |
| Oil orange.....             |                           |
| Oil neroli.....             | 3 parts by vol.           |
| Oil rosemary.....           | 2 parts by vol.           |

## TOOTH POWDER.

The following makes an excellent tooth powder :

|                          |                  |
|--------------------------|------------------|
| Milk sugar.....          | 6 parts          |
| Powdered orris root..... | 3 parts          |
| Powdered soap.....       | 4 parts          |
| Precipitated chalk.....  | 12 parts         |
| Oil wintergreen.....     | enough to flavor |

The same can be colored pink with carmine, if desired.

## TOOTH PASTE.

The following formula yields a good tooth paste :

|                         |                       |
|-------------------------|-----------------------|
| Precipitated chalk..... | 12 oz. [373 gms.]     |
| Prepared chalk.....     | 6 oz. [187 gms.]      |
| Powdered orris.....     | 6 drs. [23.5 gms.]    |
| Powdered soap.....      | 1½ oz. [46 gms.]      |
| Glycerin.....           | a sufficient quantity |
| Carmine.....            | enough to color       |
| Oil rose.....           | 12 drops              |
| Oil cloves.....         | 8 drops               |

The glycerin should be added after the powder is otherwise completed, when it can be made into a paste with same.

## FACE POWDERS.

The following two formulas are based on the actual analysis of the two most popular brands of face powder on the market :

|                                  |          |
|----------------------------------|----------|
| Precipitated chalk.....          | 23 parts |
| French chalk.....                | 24 parts |
| Bismuth subcarbonate.....        | 7 parts  |
| Zinc oxide.....                  | 17 parts |
| Cornstarch.....                  | 30 parts |
| Oil rose (or other perfume)..... | q. s.    |

or :

|                          |          |
|--------------------------|----------|
| French chalk.....        | 56 parts |
| Precipitated chalk.....  | 31 parts |
| Bismuth oxychloride..... | 13 parts |
| Perfume.....             | q. s.    |

The toilet and face powders should all be sifted through the finest sieves possible.

The above formulas will all be found excellent. They have been gathered from different sources from time to time, and have all been tried ; several of the preparations made according to them have had a good sale in the writer's experience.

## PHARMACEUTICAL PROGRESS.

**Ethereal Oil of Cicuta Virosa.**—J. Trapp (*Arch. Pharm.*, 1893, 212) finds that this oil contains cuminol and cymol.

**Crelium**, or "sapolal cresolo," which is marketed by A. Bertelli & Co., Milan appears to be similar to the well-known cresol soap mixtures (creolin, lysol, etc.) (*Pharm. Central*).

**Direct Estimation of Nitrogen in Saltpetre** is effected by Devarda (*Chem. Zeit.*) by boiling with a finely pulverized mixture of 45 parts of aluminum, 50 parts of copper, and 5 parts of zinc in alkaline solution, so as to generate ammonia from the nitrogen. The ammonia is then titrated, after adding sulphuric acid with baryta water.

**Mineral Waters free from Air**—H. Huebner (*Apoth. Zeit.*, 1893, 299) has patented in Germany a process the main feature of which consists in boiling a mineral water until presumably all the air has been driven out and then emptying the hot water directly

into a fountain filled with carbon dioxide, the air being excluded. On cooling, the fountain is charged.

**Patent Bread Oil** or "American palm oil" is the name given to an oil recently introduced for use in smearing baker's pans in Germany. Dr. Hefelmann finds (*Pharm. Central*) it is simply a mineral machine oil, consequently positively dangerous for culinary use. He has observed indigestion and vomiting to follow after eating cakes in the baking of which this oil was used.

**Valuation of Spirit of Camphor.**—Holdermann proposes (*Apoth. Zeit.*, 1893, 305) to use the polariscope for the determination of spirit of camphor. A ten per cent. spirit made according to the German pharmacopœia produces in a tube 20 m.m. long a rotation to the right of +10°. On diluting the liquid with dilute alcohol it will be found that each degree of rotation to the right indicates one per cent. of camphor.

**Protein Flour** (*protein mehl*) is the name given a substance patented by Nordlinger in Germany. According to Spindler (*Zeit. für Angew. Chem.*) it contains in the dry state 48 to 56 per cent. of nitrogenous bodies and 10 to 18 per cent. of fat. It is made by extracting oil cake or meal with alcohol, roasting the residue and removing the greater portion of the shells. It can be cooked alone or used to raise the percentage of protein with other flour.

**Internal Massage in Diseases of the Nose and Throat.**—Dr. W. Freudenthal, in a paper read before the New York Academy of Medicine, reports marked success in the treatment of both atrophic and hypertrophic rhinitis as well as various other forms of nose and throat disease by means of internal massage. He performs this massage over the entire mucous membrane of the nose or throat, as the case may be, by means of an electrically operated mallet giving some 7,000 vibrations per minute. So far Dr. Freudenthal has used massage alone, not combining it either with drugs or with electricity. The apparatus for use in this connection was designed by Freudenthal and is made by Meyrowitz of this city.

**Uricedin** is made according to the patent specifications by clarifying freshly expressed lemon juice, titrating it and adding for every 50 parts of citric acid (calculated as anhydrous) 20 parts of pure 95 per cent. sulphuric acid, and 4 parts of pure 25 per cent. hydrochloric acid, finally adding sodium carbonate until the mixture has only a slightly acid reaction. Add one part of lithium carbonate to sufficient lemon juice to exactly neutralize it, mix this solution with the first, evaporate to dryness and granulate. So prepared the mixture contains, according to the patentee, Stroschein of Berlin,

|                      | Parts, |
|----------------------|--------|
| Sodium sulphate..... | 77.5   |
| Sodium chloride..... | 1.6    |
| Sodium citrate.....  | 67.0   |
| Lithium citrate..... | 1.9    |
|                      | 148.0  |

It is therefore merely a mixture and not a "synthetic salt," as it was termed in the *Wiener Medicinischer Blätter*. A. Schneider found (*Pharm. Central*) one specimen of the uricedin to be strongly alkaline whereas it should be, and later specimens were, slightly acid in reaction. Goldmann states (*Pharm. Zeit.*, 1893, p. 317) that he failed to find any lithium in a sample, but Schneider on the contrary did find lithium though he did not estimate it quantitatively. A preparation termed uricedin cakes II. is furnished by the manufacturer as being free from starch and sugar. These cakes are said to be made of hazel nut meal, each cake containing 1 gramme (15 grains) of uricedin and 0.15 grammie (2¼ grains) of citric acid.

# News and Notes.

## Pharmaceutical Association Meetings.

### MONTHLY CALENDAR.

| Date.     | Association.        | Place of Meeting. |
|-----------|---------------------|-------------------|
| Aug. 8... | Montana .....       | Helena.           |
| " 8...    | North Dakota.....   | Fargo.            |
| " 8...    | Wisconsin .....     | Fond du Lac.      |
| " 9...    | North Carolina..... | Greensboro.       |
| " 10...   | Georgia.....        | Rome              |
| " 10...   | Illinois.....       | Chicago.          |
| " 14...   | A. P. A.....        | Chicago.          |
| " 15...   | South Dakota.....   | Yankton.          |
| " 21...   | Int. Congress.....  | Chicago.          |

## National Wholesale Druggists' Association.

The Committee of Arrangements and Entertainment have issued a circular dated Detroit, July 18, informing the members of the National Wholesale Druggists' Association that they have selected the Hotel Cadillac as the headquarters of the Nineteenth Annual Convention, to be held in Detroit from Sept. 11 to 14 inclusive. Opening business session, 8 P.M., Monday, September 11.

The committee suggest that members who anticipate attending the convention, write at once to the Cadillac, the Russell House or the Hotel St. Claire, stating just what they require in the shape of accommodations. While the Cadillac, which is a most excellent hotel, has been selected as the headquarters of the convention, the Russell House and Hotel St. Claire are both prepared to take care of any guests who may come their way, and assure the committee of the very best of service. The Cadillac and Russell House are both conducted upon the American plan, and the St. Claire, which is entirely new, upon the European plan.

The committee wish to remind the members that Detroit is a place naturally adapted for entertainment, and says that "With its beautiful avenues and boulevards, its magnificent river connecting Lake Erie with Lake St. Clair, and its Island Park, which has no equal on this continent, it can offer to our members a form of entertainment which can only be obtained by a visit to the City of the Straits. This fact, coupled with the very important business which is to come before the meeting will, we trust, bring the largest attendance in the history of the Association." Further information may be obtained from the chairman, Alanson S. Brooks, Detroit.

## Georgia Association.

The eighteenth annual meeting of the Georgia Pharmaceutical Association will be held in Rome, August 10, and 11, and many important matters will come before the meeting, among others being the selection of five members of this association to be presented to Governor W. J. Northern, one of whom will be appointed to fill the vacancy in the State Board of Pharmacy,

caused by expiration of term of Mr. S. C. Durban.

The association will adjourn on the evening of the 11th to attend a meeting of the A. P. A., which convenes in Chicago on the 14th. It is proposed to run a train of sleepers from Rome for this party, and by joining the party the trip can be made with maximum comfort and pleasure and minimum cost. Those going should at once notify D. W. Curry, chairman transportation committee, Rome, Georgia, of the number they will have in their party. Prompt attention to this is very important, as transportation companies will offer better rate when a definite number is specified.

Seabury & Johnson offer a \$75 histological microscope for the best essay by a member of a pharmaceutical association on "Substitution; its relation to the health of the people, and the best means for its prevention."

The State Board of Pharmacy meets on the ninth.

For further details address H. H. Arrington, secretary, Summerville,

## Chemists at the World's Fair.

The committees in charge of the congress have selected Monday, August 21, as the date of the opening of the congress of chemists to be held in connection with the Columbian Exposition in Chicago.

The chairman of the committee appointed by the American Chemical Society is Dr. Wm. McMurtrie, 106 Wall street, New York. The chairman of the committee appointed for co-operation in this congress by the American Association for the Advancement of Science, Chemical Section, is Prof. Ira Remson. The chairman of the committee of the World's Congress Auxiliary, on Congress of Chemists, is Prof. John H. Long. The various committees have organized by selecting Dr. H. W. Wiley, chief chemist of the Department of Agriculture, Washington, D. C., as chairman, and Prof. R. B. Warder, as secretary.

The work of the congress has been divided into ten sections and a temporary chairman has been selected for each section, as follows: agricultural chemistry, H. W. Wiley; analytical chemistry, A. B. Prescott; didactic chemistry, W. E. Stone; historical chemistry and Bibliography, H. C. Bolton; inorganic chemistry, F. W. Clark; organic chemistry, I. Remson; physical chemistry, R. B. Warder; physiological chemistry, V. C. Vauhn; Sanitary Chemistry, H. Leffman; technical chemistry, Wm. McMurtrie.

The interest already manifested in the works of the congress indicates that the meeting will be exceedingly interesting and profitable. The application of chemistry in the arts will receive particular attention. Among the papers promised are the following:

Sir Lowthean Bell, of England, subject not given.

Prof. John W. Laughley, Cleveland,

"The Use of Electrolysis in Industrial Chemical Operations" and "The Desirability of a System of Standards for Unifying the Results of Analysis."

Prof. Ed. W. Harb, Easton, Pa., "Condensation, Especially as Applied to the Distillation of Nitric Acid."

Theodore Armstrong, Penna. Salt Co., Philadelphia, "Cryolith and its Industrial Applications."

Henry Bower, Philadelphia, "The Chemical Industry of the United States" and "The Recovery of Cyanides from Coal Gas."

Prof. Chas. M. Shepard, Charleston, "The Development and Present Condition of the Fertilizer Industry of the United States."

Prof. S. P. Sadtler, Philadelphia, subject not announced.

Walter D. Field, "Pyroxylin in Solution and after Solution."

Other papers equally important are expected, and it is especially requested that those chemists who will be able and may desire to offer papers in the congress will send titles before August 1, so that they may be included in the preliminary program of proceedings to be issued shortly after that date. Those who will offer papers to be read in the Section of the Technical Chemistry are requested to send titles as soon as possible to Dr. Wm. McMurtrie.

## North Dakota Pharmaceutical Association.

From A. I. Widlund, president of the North Dakota Pharmaceutical Association, Grand Forks, N. D., we are in receipt of a communication relative to the eighth annual meeting of the association which is to convene on August 8 and 9 in Grand Forks. Every registered pharmacist in the State is a member and a large and enthusiastic gathering is looked for.

## Meetings of Boards of Pharmacy.

### AUGUST.

- 1, Iowa—Davenport, Bloomfield, Oskaloosa and Des Moines.
- 1 and 15, Maryland—Baltimore.
- 9, Arkansas—Little Rock.
- 9, Nebraska—Grand Island.
- 9, Georgia—Rome.
- 10, Louisiana—New Orleans.
- 11, North Dakota—Fargo.
- 11, Wisconsin—Fond du Lac.
- 15, New Jersey—
- 15, Ohio—Toledo.
- 29, Michigan—Marquette.

## Illinois Board of Pharmacy.

At the practical examination of the State Board of Pharmacy, Illinois, held in Chicago, July 11, 12, 13, 1893, the following passed a satisfactory examination as "Licentiate in Pharmacy," and were registered as registered pharmacists by examination: H. N. Bruun, I. W. Brunt, F. C. Cady, G. W. Clinkenbeard, M. C. Dobbratz, J. Finn, P. E. Finninger, F. Green, H. Henriksen,

A. J. Kantzabedian, E. R. Kennedy, H. E. Kelly, J. C. Kleiner, F. A. Lemke, S. M. Strohecker, H. R. Struthers, M. L. J. Ulber and J. R. F. Wall, of Chicago; J. W. Gain, East St. Louis; J. M. Naughton, Winslow; J. W. Reed, Quincy; R. B. Roe, Pinckneyville; S. F. Schick, Mt. Pulaski, and B. A. Tyler, Rockford.

The following passed a satisfactory examination as assistant pharmacists, and were registered as assistant pharmacists by examination: F. Andre, G. W. Berry, A. Campbell, R. R. Enlow, H. B. Hunter, J. E. Klenze, G. J. Lanz, C. Ressler, B. H. Rose, A. Seekamp, B. Taub, T. Taylor, F. M. Vackar and W. T. Winters, of Chicago; G. O. Jageman, Staunton; B. O. Price, Aurora, and A. B. Smith, Harvey.

The next meeting of the board for examination will be held August 14, 1893, at No. 173 39th street, Chicago.

### New Hampshire Commission of Pharmacy.

The Fourth quarterly meeting of the New Hampshire Commission of Pharmacy was held at the Manchester House, Manchester, on Wednesday July 26. The following candidates passed a successful examination: J. Arthur Bean, of Concord; Harry G. Davis, of Dover; Wilfred J. Parent, of Suncook.

### EXCURSION TO THE WORLD'S FAIR.

The committee on transportation of the American Pharmaceutical Association, through the chairman, Thos. F. Main, has issued the official circular relating to rates, etc., from which the following is condensed:

#### NEW YORK.

Excursion rates from New York to Chicago are: New York Central and Pennsylvania Railroads, \$32.00; Lake Erie and West Shore, \$28.80. These are limited tickets on thirty-five hour trains only. The Baltimore & Ohio Railroad have offered a rate of \$28.00 from N. Y., Philadelphia, Baltimore and Washington, via the Alleghenies and the far-famed Blue Ridge by daylight, going and returning same route, or going B. & O., and returning via Niagara Falls, where a "stop-over" will be permitted. Tickets are good until Nov. 15, and from the Falls members will have a choice of four routes returning. Members from Philadelphia, Baltimore, and Washington who do not desire to stop over at the Falls can obtain a direct return ticket over the B. & O., for \$27.60. In the event of a lower rate being authorized prior to the departure of members on August 11, tickets will be furnished at such lower rate. As this route will accommodate members from the points above mentioned, the Committee recommend it. Should the party going number 125 or more, a special train will be furnished for their accommodation, the itinerary of which would be as follows: Leave foot of Liberty street, N. Y., August 11, 11 P.M., arriving in Washington 6.30 A.M., Saturday, leave 1 P.M., reach Cumberland in time for supper, 8.30 P.M. Breakfast in Ohio next morning, dinner in Indiana, and arrive in Chicago after noon, Sunday, August 13.

Arrangements will be made in Wash-

ington for breakfast and dinner at 75c. each at the Ebbitt House and cabs will be furnished at reasonable rates for a five hours' drive about the city.

#### PHILADELPHIA AND BALTIMORE.

Members from Philadelphia and Baltimore desiring to travel with this party can go to Washington the previous day or take train leaving Philadelphia 8.15 the morning of the 12th, reaching Washington in time to make connections. The fare from Baltimore \$26.

Mr. Luther F. Stevens, 141 Baltic street, Brooklyn, has the matter of sleeping car arrangements in hand, and those desiring to accompany the A. P. A. party will send him check for \$5.00 as soon as possible to reserve berth. Sleeping car accommodations are *extra* in all cases and not included in any rate mentioned in this circular.

#### BOSTON.

The excursion fare over the Boston & Maine Railroad, via Montreal, is \$29.60. The Baltimore & Ohio Railroad make a rate of \$30.40 by Fall River boat or railroad to New York, and thence via Washington with New York party, returning by Niagara Falls. For further particulars inquire of their agent, Mr. A. J. Simmons, 211 Washington street, Boston, and for sleeping car accommodations send check as above to Mr. Stevens, Brooklyn.

#### ATLANTA.

Flat rate of one and one-third fare over all roads.

#### NEW ORLEANS.

The lines from N. O. have all agreed upon a one and one-third fare.

#### ST. LOUIS.

\$14 the round trip.

#### CINCINNATI.

The present rate from Cincinnati is \$7.

#### SAN FRANCISCO.

World's Fair rate of \$100 from common points in California, stop-over privileges west of the Missouri River.

Rooms in Chicago for \$1 a day and upward can be obtained by addressing Henry Biroth, local secretary, 111 Schiller Building. Any special information desired in regard to any particular section, will be cheerfully furnished by the member of the committee in your locality.

It will be noted that choice of return routes is given, but this selection must be made at this end of the line, the entire ticket being made out at the place of purchase.

Make sure of notifying Luther F. Stevens, 141 Baltic street, Brooklyn, in time to secure sleeper accommodations.

### Early Closing in Paris.

In some districts of Paris a 9-o'clock early-closing movement has begun to take effect and is apparently satisfactory. The English pharmacists here are, however, slow to take the matter up, though since June 15 Mr. Roger's Anglo-American pharmacy near the Gare Sainte Lazare has been closed at the hour named. The English chemists in the neighborhood of the Rue de la Paix are not adverse to shutting up an hour earlier than at present, but there is a lack of union amongst them. Two gentlemen from leading pharmacies canvassed the English trade recently, but failed to secure unanimity.

### Nebraska Notes.

Charles Robbins, the genial drug clerk of James Watts, Humboldt, visited his mother at Blue Hill, recently.

Rainey's drug store, Beatrice, has purchased the news and periodical department of Blenkiron, and will operate it for the future.

Dr. Seip has sold his drug store on N. 27th street, Lincoln, Neb., to H. D. Krug. The doctor will move with his family to Denver.

Byron J. Kuhne, one of the head clerks in the Richardson Drug Co., Omaha, has disappeared. His accounts are all right and some salary is yet due him.

Some tramps broke into the cellar of E. W. Clancey at Beatrice, and finding a case of wine imbibed so freely that their noise attracted a policeman to the spot and they were promptly arrested.

T. L. Fisher, of Liberty, and Miss Nevada Lewis, of Brownville, were married recently. Mr. Fisher is a graduate of the Philadelphia College of Pharmacy and has been in business in Liberty about a year.

A. H. Farrens has disposed of his business at Hastings and gone on the road for Burrough Bros., Baltimore. His territory is Kansas, Nebraska and Dakota. He formerly traveled for Searle & Hereth, but quit to go into business for himself. His health failing he goes back on the road.

### Obituary.

#### JOSEPH SIDNEY LESCHER.

Joseph Sidney Lescher, who died at Hampstead, England, on July 5, was the senior partner in the firm of Evans, Lescher & Webb, wholesale druggists, of Liverpool and London, England, and Montreal, Canada. The deceased gentleman was 89 years of age and one of the oldest members of the London drug trade.

#### JAMES HARRAL.

James Harral, an old and respected employee of W. H. Schieffelin & Co., New York, died on Tuesday, July 25, at the age of 81 years. Mr. Harral, before and subsequent to the war, occupied a prominent place in drug circles. He was at one time of the firm of Haviland, Harral & Risley, that did an extensive Southern trade with branches in Charleston and Augusta, and afterward of Harral, Risley & Kitchen and also Harral, Risley & Co.

#### THOS. SMITH.

The firm of T. and H. Smith & Co., noted for the discovery of aloin, the active principle of aloes, has in the death of Thos. Smith lost one of the founders of the firm. He had, however, retired from active connection with the firm in 1880, though he still retained an interest in its affairs. Mr. Smith was a valued contributor to pharmaceutical literature and distinguished himself by his researches into the constitution of opium. So recently as March of this year he read a paper on xanthaline before a meeting of the North British branch of the Pharmaceutical Society of Great Britain.

In the list of drug journals of the United States printed in last week's issue we inadvertently omitted mention of *The Pharmaceutical Era* of Detroit, Mich., and *The Registered Pharmacist* of Chicago, Ill.

## CORRESPONDENCE.

## In Self-Defense.

*To the Editor :*

Allow me to ask for information: Mr. Kline's letter to a Western journal asserts that his committee followed the rule, "Not to put anybody on the cut-off list who cuts in self-defense."

Chicago had no cutters until the saloon-druggist started, then the next door neighbor cuts in "self-defense" and this neighbor has a neighbor, and what neighbor has not a neighbor? So if cutting in self-defense is not to be reached by the proposed plan to stop cutting then pray tell us what does it reach?

Please let me ask you, or Mr. Kline, Mr. Torbert, Mr. Canning or Mr. Thomas Layton, is it worth while to come together five minutes to talk about any other cutting except "cutting in self-defense," or any other cutting, then, pray, ye moderate and sensible druggist, tell me (as the immortal Flanigan said), "What are we here for?" One thing is settled: no druggist, moderate or otherwise, will hereafter hope for any relief from such a committee—if backed up by the N. W. D. A.—but I understand that the sub-committee will have a minority report. I am not a member of the League but an interested party, and would ask you to keep my name out of print as I cannot afford to be assailed by such fierce logicians as Mr. Kline seems to be; however, let me tell him that the Chicago druggists, without division, call his letter the "most unkindest cut of all." I never joined the League because I always predicated it would turn out as it did.

G. O.

## The Written Mightier than the Spoken Word.

*To the Editor :*

Since you solicit the general expression of the trade on the questions of the day, I ask permission to offer mine. If we were dependent upon attending the pharmaceutical associations or wading through their official proceedings, the trade at large would remain in ignorance about what is going on in the different States, not to speak of their own. It is the office of the intelligent editor to digest and prepare the news and spread the news so that with very little effort a druggist in Maine may know all that happened of importance in California. I do not believe in hiding one's light under a bushel. If the pharmaceutical conventions of State associations or league organizations do any good, it is by letting the greatest number know of the action taken by the few who attended and studied the subject. I am glad this matter comes up, because in my opinion it should be generally appreciated that the press is a power, and that the word of the pen is mightier than the word of the orator.

PRO PUBLIC PRESS.

## Unconstitutional in One, Unconstitutional in All.

*To the Editor :*

If Mr. Knott's views are correct, that a State has not the right to collect a tax or a license from druggists to sell spirituous liquors for medicinal uses, has the United States a right to collect a twenty-five dollar license from druggists before alcohol or any other spirituous liquors for medicinal

purposes can be sold? If it is unconstitutional in one case it must be so in the other.

J. B. HARDGRAVE.

BOLTON, MISS.

## Sunday Closing.

*To the Editor :*

I observe the comments of the gentleman in your recent issue upon Sunday closing, and while I do not care to enter upon a discussion of the subject, I pray for an opportunity to present another phase of the question as it appears to me.

It is true that "sickness has no hours off," and people knowing the fact could have compassion upon the druggist and prepare for emergency or comfort themselves with the thought that thousands of others have just as severe toothache and not a drug store in sight.

The real necessity for Sunday opening seems to be selfishness. There are people who desire everybody else to discommode and deprive themselves of everything worth living for that they may buy a cigar when most convenient or have a comfortable place to loaf in while waiting for a car with the use of the directory or a place to send the children with a cent to get rid of them. Those that need the drug store least usually make the greatest howl at mention of closing.

But the greater reason is with the druggist himself. He is so small; so greedy of a little gain; so thoughtless of his home; so little regardful for his clerks; so short-sighted of his own health and has so little knowledge of a man's disability to work incessantly that he toils on, and is poor and exists as a slave.

I believe it is possible for the drug business to be conducted very much like any other; there would undoubtedly be fewer in it, but those who did survive would be men.

BOSTON, MASS.

A SLAVE.

## Sunday Sales.

*To the Editor :*

The drug stores in Roanoke, Va., keep open all day Sunday and transact business just as they do during the week, with the single exception of the sale of soda water. The ordinance prohibiting the sale of soda water applies with equal force to the traffic in cigars, tobacco, perfumes, etc., and in order, if possible, to establish our Sunday business on a more consistent basis we dispensed soda water on the day mentioned. We were summoned before the justice and made the plea that it being a medicinal compound we were at liberty to dispense it without violating the ordinance which provides for the sale of medicines on Sunday. Three of our most reputable physicians testified clearly to support our claim, but after considering the question for some days the court rendered an adverse opinion, not upon the evidence, but from a former decision by a higher court to this effect, *vis.*: That the article can be dispensed on Sunday as a medicine, but not as a beverage. The cigar question was not considered nor has it been raised yet.

We are strongly in favor of a limited Sunday opening for the exclusive sale of medicines, but if this cannot be accomplished we think that pharmacists should unite to conduct their Sunday traffic consistently with the existing laws and require others, such as hotels, restaurants, etc., to do the same.

CHRISTIAN BARBEE DRUG CO.

ROANOKE, VA.

## Uniform Price Scale for Prescriptions.

*To the Editor :*

Answering your query as to the propriety or advisability of establishing a uniform scale of prices for prescriptions in each store, I would say that the advantage thereof seems so self-evident that it scarcely admits of discussion.

As to establishing anything like a uniform scale of prices for the whole country or any subdivision thereof, does not strike me as practicable. There are so many conditions which each individual pharmacist must meet, that even local uniformity is scarcely admissible.

It goes without saying, however, that there should be an understanding in regard to prices among all the hands in each store and the price charged marked on each prescription when filed. The prices of prescriptions must be governed not only by the actual first cost of the article but by the length of time taken to consume it.

JNO. F. PATTON.

YORK, PA.

## A Check Punch for Marking Prescription Prices.

*To the Editor :*

I am not a druggist, but am a student of the National Institute of Pharmacy of Chicago, and an attentive reader of the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD, and was much interested in the proposed uniform price scale for prescriptions.

Now, instead of marking the prescription with pencil or pen, I would like to offer the following suggestion. The first druggist who fills the prescription is, of course, the man who makes the price. In order that there may be no counterfeit to the next man who may fill the same prescription, the first man could mark the prescription with a check punch and thus would mark that prescription with a mark which could not be tampered with nor changed.

In order that the mark may not be torn off, I would make the following suggestion. Taking, for instance, the prescription which was brought to Mr. Ingraham's store.

Immediately between the prescription and the doctor's signature is the place which I would recommend that the figures be cut, thus shutting off all possible danger of the price being torn off, for if it be torn off the doctor's signature must come too, and no druggist is going to fill a prescription without the doctor's signature.

This simple suggestion may I hope, will prove of some service in this country.

W. C. BURBEE.

SOUTH ASHBURNHAM MASS.

## To Suppress Cutting.

The secretary of the Kings County, N. Y., Board of Pharmacy, under instructions from the Board, visited the District Attorney of that county, and made a statement to him of the case of the dry goods stores retailing medicines. It was desired to make a charge against one of the stores as a test case, for the purpose of receiving a ruling of the courts upon the interpretation of the law relating to the sale of medicines. The District Attorney said that pressure of business was so great that he could not at that time attend to it, but that he would in the near future bring such a case to the attention of the court.

## With the Advertisers.

### In the Drug Brokerage Business.

Hiland Flowers, who graduated some years back from the Philadelphia College of Pharmacy, has engaged in the drug brokerage business and is prepared to handle oils, paints, drugs and chemicals on commission. He is making a specialty of handling heavy foreign goods and invites correspondence from reliable jobbing firms. Mr. Flowers enjoys the distinction of special mention in the National Dispensatory from his observations on the milk juice of *Lactucarium canadensis*, which he found to possess the same constituents as European lactucarium though it did not possess the characteristic bitter taste of the latter until the plant is in full bloom.

### Liebig's Extract of Beef.

This widely known extract still maintains its high position as an article of diet for the sick and convalescent. Its success has been the means of bringing forward countless imitations, but physicians generally still prescribe the brand bearing the signature of Justus von Liebig, which is regarded as genuine and of finest flavor.

### Stock Bottles Free.

The Smith, Kline & French Co., of Philadelphia, have announced that in order to introduce their fluid extracts more prominently to the notice of the retail druggists of the United States, they will with first order for 25 pint bottles of S. K. & F. Co.'s fluid extracts furnish free 25 glass labeled bottles. This is an exceptionally generous offer which should be largely taken advantage of. In communicating with Smith, Kline & French Co. regarding this offer, druggists should mention the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD.

### Chemical Apparatus and C. P. Chemicals.

Probably no other firm of wholesale and retail druggists in the United States carry on hand such an immense variety of rare chemicals as Eimer & Amend, of New York City. They are recognized as headquarters for everything that is new or rare in the line of chemical apparatus or fine chemicals, and are constantly applied to by the learned institutions of this State to supply the chemically pure materials used in chemical research, whether assay, philosophical or the other branches commonly referred to as chemical. Druggists in search of rare drugs or chemicals, anilines and synthetic chemicals generally, will have no difficulty in procuring such from Eimer & Amend. The stock of philosophical glassware kept in stock by this firm is as varied as it is interesting, and as illustrations of this form a prominent feature of their classified catalogue, every druggist

who desires to familiarize himself with philosophical instruments of this kind should procure a copy.

### Palmer's Perfumes.

We illustrate herewith the style of container adopted by the firm of Solon Palmer for their Baby Ruth Perfume, a new perfume brought out recently, which is already



finding ready sale. The bottle is of the appearance presented in the accompanying cut. It is packed in a neat paper box and is inclosed in cotton. The package is well adapted for holiday display, being exceptionally neat and attractive.

### Prescription Glassware.

New designs are constantly being introduced by glass bottle manufacturers and it is almost essential, if druggists wish to keep posted on the different makes, to inform themselves of the different changes by consulting the catalogues of reliable makers who make a specialty of druggists' prescription glassware. Prominent among the latter is the firm of T. C. Wheaton & Co., Millville, N. J., which has an established reputation for both the excellent character of their goods, and close quotations. They are at present directing the attention of retail druggists to their "French oval," a new and handsome design for which the point is made that they are sold on the oval list, which makes them cheaper than the ordinary grade. Messrs. Wheaton's agent in New York is B. L. Hume, who will be glad to furnish additional information to any druggist mentioning the DRUGGIST AND RECORD.

### Seabury's Laboratories.

What graduate of the Philadelphia or New York Colleges of Pharmacy is unfamiliar with the Seabury Laboratories?

Few, we surmise. The education of a pharmacy student is not considered complete until he has inspected the working laboratories of great firms and so the students of the graduating classes of the above colleges are allowed annually to inspect the laboratories of Seabury & Johnson, at East Orange, N. Y. We learn that owing to recent increases of business the firm has been compelled to add to the existing collection of buildings which constitute their immense works, which speaks well for the character and reputation of the house.

### The Lakes of New York.

There is no more picturesque portion of the United States than the lake region of Central New York. The scenery is enchanting and diversified, appealing to the imagination quite as much as it gratifies the eye. A beautifully illustrated brochure setting forth the attractions of this region has been issued by George H. Daniels, General Passenger Agent of the New York Central and Hudson River Railway, and may be had upon application accompanied by two 2-cent stamps. Write for this if you are thinking out a delightful Summer excursion, and mention the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD. This route is particularly interesting to druggists, as it takes one through the Lake Keuka wine district.

### Consolidation of Merck and Trommsdorff.

E. Merck and H. Trommsdorff have issued a circular in which it is stated that the chemical works and entire stock of H. Trommsdorff, at Erfurt, Germany, will pass into the hands of E. Merck on August 1, and the manufacturing department and office will be transferred to Darmstadt. The above is not to include sozoidole preparations or Lauer-Brenner plaster, both of which will continue to be produced at Erfurt.

### For Cream Soda.

The St. Charles Evaporated Cream (unsweetened) is claimed to be an excellent substitute for ordinary cream in the preparation of cream syrups for the soda fountain. It is also used extensively as a substitute for ordinary milk and cream, and is highly valued on account of its purity, being perfectly sterilized and consisting of cream of cow's milk less water of evaporation. It may be obtained through wholesale druggists or ordered direct from Delafield, McGovern & Co., 91 Hudson street, New York.

### Rubber Goods of Guaranteed Quality.

Rubber goods are among the specialties which druggists should use more than ordinary care in selecting, for when not of

the first quality they rapidly deteriorate and become worthless. The Tyer Rubber Co., of Andover, Mass., make special mention of the excellent quality of their goods and claim that the word "Tyrian," which is their trade mark on rubber goods, is a guaranty of their quality. Druggists would do well to bear this in mind when ordering goods of this description.

### Merck & Co.'s Exhibit at the Fair.

The exhibit of Merck & Co. at the World's Fair is contained within a handsome pavilion, which is situated in one of the most easily accessible and prominent positions of all the grand displays shown within the walls of the White City. It is located at one end of the now famous Midway Plaisance and convenient to the central gateways. Druggists visiting the Fair are assured of a hearty welcome at the Merck Pavilion, which is in charge of Thos. P. Cooke.

Merck & Co. have been granted the sole privilege of furnishing the drugs required by the Medical Bureau of the Fair, and in testimony thereof have received the following letter from H. H. Higinbotham, president:

*Messrs. Merck & Co., New York.*

GENTLEMEN: I have to inform you that the directors have decided to have you furnish exclusively all drugs and chemicals which shall be used in the service of the Medical Bureau of the World's Columbian Exposition.

Requisitions for supplies will be made upon you through the office of the Medical Director, from time to time, as such supplies may be required.

Very respectfully,

H. H. HIGINBOTHAM,  
President.

### Powder Mills.

Powder mills are among the druggists' machinery handled by J. H. Day & Co., Cincinnati, O., but they constitute only an infinitesimal part of the special machinery used in the operations of practical pharmacy, which are made by this widely-known firm. The lightning packer advertised in this paper is a machine used largely by firms who put up powdered drugs. They are also used for general purposes, being as well adapted for packing one-half ounce as six pounds. The illustrations given in their catalogue are most interesting and those in the trade who wish to know of the various labor-saving devices made by J. H. Day & Co., should write for a copy of their illustrated catalogue mentioning this paper.

### Williams, Davis, Brooks & Co.'s Supplementary Price List.

Williams, Davis, Brooks & Co., importers and wholesale dealers in drugs and druggists' sundries, Detroit, Mich., have issued a supplementary price list of holiday novelties, which includes mention of albums, collar and cuff boxes, photo cases, mirrors in various designs, inkstands, manicure sets, shaving sets, toilet combinations, jewel and work boxes, smoker sets and other novelties in the line of druggists' sundries. A discount of 50 per cent. is allowed on prices quoted.

The firm also publishes a supplementary price list of drugs, chemicals, paints, oils and patent medicines in which the volume of business transacted up to the middle of July, 1893, is compared favorably with the corresponding period of 1892. Reference is made to the fact that though collections

are slow, yet in their opinion interior dealers are paying more attention to collecting, as money is being received in larger quantities than a month ago. Price changes are referred to as being comparatively few, but the tendency has been downward rather than upward.

Special attention is directed in this list to "Dabrook" perfumes, a neat line of perfumes put up and handled by Williams, Davis, Brooks & Co.

### Chocolat-Menier Building at the World's Fair.

The Menier Building, erected by the same contractors that built the Administration Building, is one of the prominent features of the White City.

No greater recognition of the superiority of Chocolat-Menier as distinct from the ordinary manufactured goods could be given than this location awarded to Menier.

Their building is the only one in the area bounded by the Terminal Railroad Station Administration Building, Machinery and Mines.

Anyone who will mention this journal and send his name and address will receive a pass, which will, when presented at the Menier Building any time during the World's Fair, entitle the bearer to all the privileges of this beautiful pavilion, and also to a very liberal sample of Chocolat-Menier free.

Address Menier, 86-88 W. Broadway, New York City, or 59-61 Wabash avenue, Chicago, Ill.

### Spruce Gum as a Druggist's Specialty.

A novel and interesting window display can be made by exhibiting a heaped up mass of pure spruce gum.

A druggist in St. Louis succeeded recently in drawing immense crowds to his window in this way, and at the same time sold an immense quantity of the article which was labelled "Curtis & Son's Yankee Brand Pure Spruce Gum." A neat ticket was attached showing the price per ounce. The druggist obtained his supply from Curtis & Son, Portland, Me.

### Extract of Witch Hazel.

The witch hazel situation is full of interest at the moment. The consumption of this household remedy has materially increased of recent years. The annual output of the extract is now 20,000 barrels, nearly all of which is distilled in Eastern New York and Connecticut. The distillers are now hustling for orders in the New York market and in consequence prices are fluctuating, and the market "see-saws" in a way that would do credit to the Stock Exchange.

There seems to be an erroneous impression that witch hazel should contain 15 per cent. of alcohol. As alcohol is added simply to preserve the product, an amount sufficient to act as a preservative is all that is necessary. Experience shows that 12 per cent. is ample, 3 per cent. immediately after it is distilled, and 9 per cent. in about a month afterward. The contending firms each accuse the other of using less than the necessary 15 per cent. of alcohol, hence the varying of prices, while it is asserted that none of the commercial extracts ever contain more than 11 or 12 per cent. of spirit.

### NOTES ON PRICES.

#### CHEMICALS.

Powers & Weightman, manufacturing chemists, Philadelphia, in their circular issued under date of August 1, note an advance in citric acid, and declines in the following goods: Apomorphine muriate, bismuth salicylate, caffeine bromide, extract of opium, reduced iron, lunar caustic, denarcotized opium, potassium chlorate, silver salts, sodium carbonate, sodium hyposulphite, sodium phosphate, sodium sulphite.

#### SPONGES.

The following are jobbers' prices for the varieties named below, as follows:

|                            |                     |               |
|----------------------------|---------------------|---------------|
| Sheep's wool, Florida..... | 40 to 60 lb. bales, | \$1.65 @ 2.50 |
| Cuba.....                  | 50 to 100 lb. "     | 1.55 @ 1.75   |
| Reef.....                  | 50 to 60 lb. "      | 1.05 @ 1.20   |
| Slate, yellow.....         | "                   | 0.40 @ 0.65   |
| Surgeons'.....             | boxes and strings.  | 1.75 @ 4.50   |

#### PACKAGE PRICES.

The circular issued by William H. Raser, drug broker and commission merchant, 32 Platt street, New York, under date of July 26, mentions that trade is dull, and there are few changes to note. Opium is quoted at \$2.40 and at \$2.40 @ \$2.45 1/2 for broken lots, but it is very probable that a tender of \$2.35 for single cases would find sellers, and it is reported that a lot of 25 cases was sold for considerably less, rumor says at \$2.25, cash. Pure powdered opium is quoted at \$3.30 @ \$3.35, but for a 50 lb. lot \$3.25 would buy. Quinine is pretty steady, but foreign bulk held generally at 18 @ 18 1/2 c. for jobbing parcels as to brand, quantity, etc. Round lots can be secured at 17 1/2 c. cash. Unfilled orders are still in brokers' hands at a limit of 17 c., but no sellers seem to be tempted by the offer. Yesterday's London bark sale was a small one at about previous prices. Shellacs are in moderate demand, but holders are firm at previous quotations, with DC somewhat higher. Senega root has declined, and is offering in this market at 40c. in ton lots for spot delivery. It is rumored that 37 1/2 c. in the West will buy new crop for forward shipment. Citric acid in kegs at 45 1/2 c. and bbls. at 45 c., these figures being 1/2 c. under makers' prices. Tartaric acid, powdered, white, in bbls. at 23 1/2 c., 5 bbls. at 23 c. f. o. b. Cream Tartar, powdered pure (99 and 100%) at 19 1/2 c. for single bbls., and 19c. for five bbls. or more. Camphor manufacturers are firm at 50c., but outside lots are offering at 46 @ 47c. bbl. German chamomiles, new crop, at 22 @ 25c. as to selection, good old flowers at 17 @ 18c., and poorer quality is still less. Ergot, firm at the advanced quotations of last issue. Cuttlebone Trieste, in straps at 11c. Quicksilver is lower; single flasks at 52 1/2 c.; round lots could be secured at 52c. cash. Tonka beans, Angostura prime, in 25 lb. lots at \$1.75. Soap bark, large arrivals and lower prices; whole offering in ton lots at 3 1/2 c. and smaller lots at 3 1/4 @ 4c. Ground and cut soap bark at 4 @ 4 1/2 c. as to quantity. Oil peppermint, HGH, single cases at \$2.70. Prime Western and Wayne County at \$2.30 @ \$2.50. Pure Kissanlik oil rose by can at \$5.75 and smaller lots at \$6.00. Oil Wintergreen, true, at \$1.65, artificial at \$1.07 1/2 @ \$1.10, or less. Oil sassafras, true, at 35c. Oils bergamot and orange have declined, lemon unchanged. Oils anise, cassia, cubeb and clove are lower. Celery seeds held at 11 @ 11 1/2 c., though one lot offering at 10 1/4 @ 10 1/2 c. as to quantity. Japan wax, tending higher, 7 1/4 @ 8c. asked to-day. Singapore pepper at 5 @ 5 1/2 c. China cassia advancing to 5 1/4 @ 6c.

## Review of the Wholesale Market.

NEW YORK, August 2, 1893.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

The volume of business transacted in drugs, dyestuffs and chemicals still continues of meager proportions. There is a notable absence of important demand, and inquiries from interior points reflect a continuance of the cautious policy of covering only immediate wants which was referred to in last week's report. This lack of speculative interest is responsible for the general quietude of the market—a very noticeable condition at this season. The movement of full packages is depressingly slow, but a fair interest is manifested in jobbing parcels, and the distribution of the latter is reported better in the West. This in view of the prevailing stringency in money is encouraging, and the outlook for a restoration of confidence is better than it has been for some time past. Prices are fairly steady though the advantage appears to be in buyers' favor. Caraway seed, rose oil and saltpeter are firmer and higher. Declines are noted in Senega root celery seed, colocynth and gambier.

## DRUGS.

**ALCOHOL**, grain, has been in moderate consumptive demand during the past week, and prices continue steady at \$2.18 @ \$2.22 with the usual conditional rebate.

**ARNICA FLOWERS** are unchanged at previous values, though quotations from primary sources come higher.

**BALSAMS**.—Copaiba continues very dull and neglected, though without quotable change in value. Central American has been offering at 32c. from importers' hands, but this is above jobbers' ideas, who are not inclined to pay above 28c. Canada fir is jobbing moderately at \$2.50. Oregon is weak and sluggish at 75 @ 85c. A quiet feeling prevails in Peru with quotations on a basis of \$1.35 @ \$1.50 as to quality. Tolu is also quiet at 22 @ 25c.

**BARKS**.—The market for the various descriptions is unusually tame. Orange peel has received some attention the past few days, and business is reported to the extent of 400 bales, the terms for which did not transpire. The price of jobbing quantities is now 6c. Soap remains quiet at the recent decline.

**CANTHARIDES**, Russian, are momentarily neglected and supplies are obtainable down to 70 @ 75c.

**CACAO BUTTER** is firmer abroad, and higher prices are anticipated at the approaching sale in Amsterdam.

**BUCHU LEAVES**, short, are fairly firm and in moderate jobbing request at 12 @ 15c. as to quality.

**CHAMOMILE FLOWERS** are in moderate jobbing demand at about previous prices. The crops abroad as evidenced by reports from Germany and Hungary are light, but this market is not influenced by such reports.

**CHLORAL HYDRATE** has received some attention during the past few days, the board of appraisers of this port having sustained a decision of the collector in imposing a duty of 50c. per lb. on chloral hydrate. Importers and foreign manufacturers' agents have strongly opposed this rating and entered protest on the ground that a 25 per cent. ad valorem rate is more in accordance with their ideas of justice. It is thought that the decision

referred to will affect many of the alkaloidal drugs in the manufacture of which alcohol plays an important part.

**COLOCYNTH APPLES** continue dull and the tone of the market is easy. Trieste offer at the range of 27 @ 38c. Spanish is held at 20 @ 24c.

**CUBEB BERRIES** continue very dull. S. & S. are held at 30c. and ordinary grades at 25c., though these prices can be shaded in some instances.

**ERGOT** remains quiet, but the market is firm in tone with 40c. asked for German.

**GUARANA** is quiet and fairly steady at \$1.05 @ \$1.10.

**LUPULIN**, German, ordinary to prime grades are held at 70c. @ \$2.25.

**LYCOPodium** is in small and concentrated supply and held at 53 @ 55c. as to marks.

**MENTHOL**, Japanese, J.C. brand, is offered in 5 lb. tins on the basis of \$3.60.

**MANNA** is not attracting any special attention at present, but the stock is fairly well concentrated and held at the range of \$1.25 for large flakes and 42c. for small.

**OPIUM** is in a somewhat uncertain condition, and the present situation is weak and unsettled, as a result of which speculative investments are held in abeyance, though there is every disposition on the part of holders to dispose of stock. Full packages can be secured down to the point of \$2.25 and perhaps less. In a jobbing way \$2.35 is asked for single packages, but only a limited demand is to be noted, the general disposition on the part of buyers being to cover current necessities only, the price paid in this way coming within the range of \$2.37½ @ \$2.40. Powdered has declined since our last report and is selling moderately at \$3.25 @ 3.30.

**QUININE** appears to be in firmer position and better demand, though there is seemingly no disposition on the part of holders to urge sales at concessions. Foreign in large bulk is in good consumptive demand at 18 @ 18½c., which appear to be the regulation prices. The London market is called slightly better, the quotation given being 9½d.

**SAFFRON**, American, is selling in a small way at 35 @ 40c.

**SUGAR OF MILK** is fairly active at 12 @ 14c. for domestic powdered.

**VANILLA BEANS** are maintained at full previous prices, without, however, any important speculative inquiry.

## DYESTUFFS.

**CUTCH**, SM is very depressed, with the nominal range at 4½ @ 5c.

**GAMBIER** has been moderately active during the week and is in good supply. Among recent sales are included 25 tons at 3¾c., this being ex-Manitoba. The store price remains nominally 4 @ 4½c., while for forward shipment 4c. is asked.

**NUTGALLS** continues in limited demand, though Aleppo are held at 14 @ 14½c. with considerable steadiness; Chinese are quoted 13 @ 13½c.

**SUMAC** is inquired for to some extent and is fairly steady at \$72.50 @ \$77.50 for Sicily and \$43 @ \$47.50 for Virginia.

## CHEMICALS.

**ARSENIC**, white, continues in fair request and with generally light supplies. The market is maintained at the range of 3½ @ 3¾c. as to brand and quantity.

**BLANCHING POWDER** is, in view of the continued reports of strikes abroad and the anticipated lessened production of manufacturers, held firmer, though prices here are nominally unchanged. We quote Ger-

man at 2¼c. and English in casks 2¼ @ 2½c.

**CARBOLIC ACID** is not inquired for to the extent usual at this season, but a freer distribution is expected soon. Importers continue to quote previous values.

**CHLORATE OF POTASH**, in common with other goods of the Alkali Union, continues steady in price though inactive at nominally unchanged values.

**CITRIC ACID** is passing out in moderately large quantities to consumers at manufacturers' prices. We quote the range at 45 @ 46c. English acid is practically out of the market, the high import cost precluding competition with the domestic article.

**CREAM TARTAR** is inquired for to some extent in a jobbing way, and manufacturers' prices still represent the market.

**NITRATE OF POTASH**, crude, is improved both in position and demand, and the stock is small and well concentrated. The quotation for store goods is 3¾c., while to arrive and forward shipment August-October are quoted 3.55c. and 3½c. respectively.

**NITRATE OF SODA** offers in instances down to \$1.65 for quantities ex-vessel, while the store price remains \$1.70 @ \$1.75 as to quantity.

**BLUE VITRIOL** continues in steady fair request with the sales at 3½ @ 3¾c.

**TARTARIC ACID** is well maintained at 22½ @ 23c. for crystals, this range representing manufacturers' quotations.

**SAL SODA**, English, is generally held at \$1.05 @ \$1.10. These prices also apply to sal soda of domestic make with the exception that the outside figures can be shaved 2½c.

**SODA CAUSTIC** and **SODA ASH** are quiet at unchanged prices.

## ESSENTIAL OILS.

**ANISE** continues at \$1.35 @ \$1.40 with only a limited jobbing reported.

**BERGAMOT** is held at about previous prices.

**CASSIA** is passing out in jobbing quantities at the range of 75 @ 82½c.

**CLOVE** is steady and in moderate request at 55 @ 60c.

**CUBEB** continues held at \$2.50 @ \$2.60, but the business passing is limited to jobbing proportions.

**GINGER GRASS** is passing out in small quantities at \$2 @ \$2.25.

**CAMPHOR** has received some attention during the past week, and among the sales reported is included one of three thousand pounds on private terms.

**PENNYROYAL** is without interest at the moment, a light jobbing business being in progress at \$1.40 @ \$1.50.

**PEPPERMINT**, HGH, is held at \$2.70, but the demand continues extremely light. Bulk is held at \$2.45 @ \$2.60 as to quality.

**ROSE** continues firm at the recent advance. Advices from Kissanlik report the crop as all harvested, but no prices have been established by the distillers.

**TANSY** is in weaker position but is not quotably lower, being maintained within the range of \$2.05 @ \$2.20.

**WINTERGREEN** is in good seasonable request at nominally unchanged prices. We quote Artificial at \$1.10 @ \$1.15 and True at \$1.62½ @ \$1.70.

## GUMS.

**ALOES** of the different varieties are without important change either as regards price or demand. Curacao is probably

quieter but firm and the existing stock is light. Gourds are, however, in heavy supply with  $4\frac{1}{2}$  @ 5c. the general asking price. This is regarded as above the ideas of buyers and business is consequently dull.

CAMPOR, refined, is only in limited demand at the cut on manufacturers' prices.

CHICK is quiet, but supplies appear to be under good control and held at 38 @ 40c.

KINO is jobbing slowly at nominally unchanged prices.

SENEGAL, Sorts, are slightly easier with the present range  $9\frac{1}{2}$  @ 10c.

SHELLAC continues quiet but is maintained in steady position. Recent cables from London advise an advance of two shillings in the price of TN for August delivery, thus raising the quotation there to 109s. DC, in this market is held with increased firmness due to the small supplies in the hands of the trade; 33c. is quoted as inside for jobbing quantities.

TRAGACANTH has been inquired for and the market is maintained with a fair show of steadiness at 43 @ 63c. for Aleppo.

#### ROOTS.

ACONITE, German, is not in much demand though unchanged at 9 @ 14c. as to quality and quantity.

GINSENG continues to offer at the range of \$1.75 @ \$2.75, but there is little or nothing doing owing to the disturbed financial situation in China.

GOLDEN SEAL continues very quiet at unchanged values. We quote the outside figure at 21c.

IPPECAC is passing out in small lots at the range of \$1.27 $\frac{1}{2}$  @ \$1.32 $\frac{1}{2}$ .

JALAP is yet held at the range of 21 @ 24c.

SARSAPARILLA, Mexican, is in moderate demand and firm at 8 @ 8 $\frac{1}{2}$ c. The entire stock is said to be controlled by second hands.

SENEGA is tending lower, though the available stock spot and forward is under pretty close control and does not offer below 42 $\frac{1}{2}$ c.

VALERIAN is given no attention, though prices are well maintained at 7 @ 7 $\frac{1}{2}$ c. for Belgium and 10 @ 12c. for German.

#### SEEDS.

ANISE, Italian, sifted, is firmer with best grade selling up to 10 $\frac{1}{2}$ c.

CANARY, Smyrna, is in good jobbing demand at 2 $\frac{1}{2}$  @ 3c. as to quantity.

CARAWAY, Dutch, has been inquired for to some extent, and among recent sales are included some 500 bags at 6 $\frac{1}{2}$ c. We quote the regular selling range at 6 $\frac{1}{2}$  @ 7c.

CELERY in a jobbing way is meeting with some inquiry at 11 @ 11 $\frac{1}{2}$ c.

CORIANDER comes higher from primary sources, the import price of unbleached being cabled at the equivalent of 2 $\frac{1}{2}$  @ 3c.

FENUGREEK offers more freely, and down to 2 $\frac{1}{2}$ c. is quoted as acceptable.

HEMP, Russian, remains quiet but firm at 2 $\frac{1}{2}$ c.

MUSTARD does not change from 6 $\frac{1}{2}$  @ 7 $\frac{1}{2}$ c. for California yellow and 3 $\frac{1}{2}$  @ 4 $\frac{1}{2}$ c. for California brown, while Bari brown is steady at 5 $\frac{1}{2}$ c.

POPPY, blue, is dull but steady at 8 $\frac{1}{2}$ c., which is now quoted as an inside price, though sales of about 100 bags at 8 $\frac{1}{2}$ c. are reported.

Prof. Chas. F. Heebner, dean of the Ontario College of Pharmacy, reached New York City on Wednesday, July 12, where he will spend a couple of weeks. He will then join his father's family in Lee, Mass., where he will spend the remainder of the Summer. During last week he inspected the extensive works of the Springer Torsion Balance Co., in Jersey City, and was very favorably impressed. Since his removal to Canada the Professor has become an enthusiastic wheelman, his long distance medals, his sunburnt skin and his hardy appearance bearing eloquent testimony to his enthusiasm in this direction. Notwithstanding his arduous duties as dean, lecturer and director of the laboratories of the Ontario College of Pharmacy and as lecturer on materia medica in the medical faculty of the University of Ontario, Professor Heebner has found time to prepare an able and useful synopsis of the B. P. preparations, and to make a beginning toward the revision of his popular "Manual of Pharmacy."

To Julius C. Vogt, of Louisville, we are indebted for a copy of the invitation card issued by the Louisville College of Pharmacy to its 23d annual commencement. The card is of most attractive appearance being engraved in color of a deep lilac and bearing silk ribbons of the college colors one of which is neatly lettered in gold with the words "Louisville College of Pharmacy."

Burroughs, Wellcome & Co., importers, exporters and manufacturing chemists of Snow Hill Building, London, E. C., have been awarded two marks of distinction and honor at the Monaco Exhibition—namely, the grand diploma of honor for pharmaceutical products, and the gold medal for "tabloids."

## Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted free of charge. Write distinctly, on one side of paper only, and do not use postal cards.*

#### POSITIONS VACANT.

SENIOR—Registered in New York State; about 25 years of age; mention salary expected in applying to Dr. G. Steinfuhrer, 209 State street, Schenectady, N. Y.

TO AN HONEST and temperate drug clerk licensed in Penna., a good position is open. Address J. T. B., care of AMERICAN DRUGGIST, 37 College place, New York.

WANTED—Traveling men who visit the drug trade to handle a well established specialty as a side line. Liberal commission. Apply at once. Wilmot Casile & Co., Rochester, N. Y.

PROFESSOR OF PHARMACY—Wanted in medical department University of Texas, located at Galveston, Texas; election takes place during the meeting of the Board of Regents in September at Austin, Texas; applicants for above position will please address T. C. Thompson, M.D., Regent, University of Texas, Galveston, Texas.

SALESMAN WANTED to handle as a side line a new tablet triturate mold retailing at from \$1.25 to \$1.50 each, one that every druggist should have; quick sales, little work, liberal commissions. For particulars apply to American Triturate Mold Co., 1130 S. 12th street, Philadelphia, Pa.

#### POSITIONS WANTED.

SITUATION WANTED—By a pharmacist, licentiate of New York State Board of Pharmacy. Honest and temperate. Address "Powder," care J. G. Wigg, Stamford, Conn.

AS TRAVELING SALESMAN—Druggist having 15 years' retail experience and large acquaintance in the trade wishes position on the road with some reputable house. Address "Quinine," care of AMERICAN DRUGGIST, 37 College place, New York.

WANTED, in the State of California, a position in good drug store; will work for small salary; three years' experience, strictly sober, good habits, best of reference. Address Fred S. Hoback, Big Stone Gap, Va.

YOUNG MAN, single, 5 years good practical experience, desires position; references A1; place out of town preferred. Address "Aristol," care of AMERICAN DRUGGIST, 37 College place, New York.

SITUATION WANTED by drug clerk, graduate of Philadelphia College of Pharmacy; long experience; single, reliable, moderate salary; go any distance. Address Daniel P. Custis, New Berne, N. C.

POSITION WANTED in Brooklyn, by N. Y. State licensed clerk, small salary, privilege of college this Fall. Address "Sulphonal," care AMERICAN DRUGGIST, 37 College place, N. Y.

#### BUSINESS OPPORTUNITIES.

FOR SALE—Half interest in a good paying store in a rapidly growing town in Blair Co., Pa. Address "Salol," Box 656, Bellwood, Pa.

DRUG STORE for sale in nice residence portion of western part of Bridgeport, Conn., \$2,000 cash. For business call at 380 State street, Bridgeport, Conn.

FOR SALE—Well established drug business in a lively shipping town on the Erie Railroad; only drug store within a radius of 12 miles; new store with pleasant living rooms over, rent for store, rooms and barn \$12.50 per month, inventory \$200; liberal discount on fixtures. Address Dr. Thad Smith, Cameron, N. Y.

FOR SALE—One case, Boericke & Tafel's Homoeopathic medicines, in first-class condition, will be sold at a bargain. H. Alex. Stoke, Reynoldsville, Pa.

DRUG STORE for sale, stock and fixtures, in the growing town of Great Falls, Mon.; best of reasons given for selling; will be sold at a discount if taken at once. Address J. W. Roberts, Great Falls, Mon.

FOR SALE—Drug store in Baltimore; central location, opposite Lexington Market; an immediate buyer can secure bargain; sold to close an estate. Address W. B. Morrison, 330 West Lexington St., Baltimore, Md.

FOR SALE—Drugstore in New Jersey; situated 10 miles from New York City; established 30 years. Address "New Jersey," care of AMERICAN DRUGGIST, 37 College place, New York.

WANTED—To hear of good location for drug store, or party with location that would take partner. With stock, etc., to increase business. R. L. Doty Jamestown, N. Y.

WANTED—Complete volumes of the *New Remedist*, of 1872, 1873 and 1875 (vols. 1, 2 and 4). Address stating price and condition, E. E. Borgmann, Station A, St. Louis, Mo.

FOR SALE—Drug store, at inventory \$1,300 to \$1,500; paying business; about 25 miles from Paul Smith, N. Y.; large territory; good reasons given for selling on application; store near to post-office and hotel; rent low. Address "Sulphonal," care of AMERICAN DRUGGIST, 37 College place, New York.

FOR SALE—A leading pharmacy, located in business center of Buffalo, N. Y.; elegant fixtures; complete stock in good condition; over 200,000 prescriptions on file; established over 30 years, during which time there has been only three owners; on account of ill health will be sold at a sacrifice. Address C. O. Rano, Buffalo, N. Y.

DRUG STORE for sale, stock and fixtures, in a thriving and beautiful city on the Hudson River, near New York, owned by a physician who wishes to devote his entire time to practice. Only \$1,500 required. A rare bargain for an energetic man. Address "Doctor," 24 Colden street, Newburg, N. Y.

**Clerks and Employers should call at this office, register their wants and examine our list of POSITIONS WANTED POSITIONS VACANT and BUSINESS OPPORTUNITIES, which can be consulted free of charge.**

# American Druggist and Pharmaceutical Record.

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### AMERICAN DRUGGIST PUBLISHING COMPANY.

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A. R. ELLIOTT, PRESIDENT.

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*Liberal Commissions to Club Agents.*

### THE APOTHECARIES' UNION ON THE REBATE PLAN.

M. N. KLINE gives in this the issue correspondence between himself as chairman of the committee on proprietary articles of the N. W. D. A. and the Apothecaries Union Limited, of Philadelphia, relative to the attitude of the N. W. D. A. toward the retail drug trade in which Mr. Kline defends the course taken by his committee.

The Apothecaries' Union and with them a good many retail druggists believe that the rebate plan on its present basis affords protection to the jobber at the expense of the retailer. This view of the case has some element of reason behind it. The action of the Interstate League, however, and also correspondence from many able workers in this field, indicates that for the present at least it is to the interest of retailers at large that the rebate plan be continued in force.

### PHARMACISTS' WEEK AT THE FAIR.

"PHARMACISTS' WEEK" will commence at the World's Fair on Monday next, when the annual convention of the American Pharmaceutical Association will open its proceedings with the council meeting. To this convention, as a center, will converge members of the pharmaceutical profession, not alone from the United States and Canada, but from many foreign lands. This, the forty-first annual meeting of the association will be the greatest in its

history. The number and character of the papers already received by the different committees has given early indications of this, far more papers of value having been thus early received for this meeting than have been sent in in any previous year. This and the other evidences of interest, which pharmacists, both members and non-members alike, have displayed, is of course, a source of much gratification to the officers of the association, who will through these evidences receive fresh incentive toward concerted effort for the general betterment of pharmacy in the United States.

The programme of the meetings for this and the pharmaceutical congresses is as follows:

Monday, August 14.—10 A.M., Council Session; 3 P.M., First General Session; 8.30 P.M., Reception.

Tuesday, August 15.—9 A.M., Second General Session; 3 P.M., Section on Commercial Interests; Section on Scientific Papers; 8 P.M., Section on Commercial Interests; Section on Scientific Papers.

Wednesday, August 16.—Visit to the Exposition.

Thursday, August 17.—9 A.M., Section on Scientific Papers; 3 P.M., Section on Education and Legislation; 8 P.M., Section on Education and Legislation.

Friday, August 18.—Visit to the Exposition.

Saturday, August 19.—9 A.M., Final Session; 9 P.M. Boat Ride on the Lake.

Sunday, August 20.—Rest.

Monday, August 21.—10 A.M., World's Congress of Pharmacists; 8.30 P.M. Reception of Foreign Guests.

Tuesday, August 22.—10 A.M., International Pharmaceutical Congress.

Wednesday, August 23.—10 A.M., International Pharmaceutical Congress; 8.30 P.M., Banquet

Thursday, August 24.—10 A.M., International Pharmaceutical Congress.

### PATENTS IN ENGLAND.

THE patent medicine stamp continues to exercise the minds of British pharmacists. Loud complaints are being made of the manner in which unwary chemists are being trapped by officers of the revenue who are said to be disguised for the purpose and "paid by results." The fines which are imposed are excessive and in most cases a compromise is effected, victims being usually more inclined to part with two or three guineas than be brought into court. The worst feature of the matter is that the use of the possessive case is considered liable. A box labelled "Blaud's Pills" is thus dutiable in proportion to its value while a box labelled with the grammatical monstrosity "Blaud Pills" is declared by the authorities to be exempt.

*Written for the American Druggist and Pharmaceutical Record.*

### IF THE CHOLERA COMES.

By CYRUS EDSON, M.D.,

Health Commissioner of the City of New York.

It is to be regretted that some of the newspapers resort to sensational head lines, and thus unnecessarily alarm the public in connection with contagious or infectious diseases. While much good is accomplished through leading the people to observe the laws of sanitation, in their own persons, there is also much harm done through unreasoning fear and nervous dread which is caused by these sensational methods. The mere fact that the Karamania was detained at quarantine should not be a source of great alarm, for never in the history of this country has its sanitary condition been so good.

Cholera has been generally prevalent in the interior of Russia and in Asia ever since last year and has been known to be epidemic in the south of France since March of this year. Its existence in Naples has recently come to light, and it has recently become epidemic there. The north of Europe has been free of cholera since April, when some cases occurred in Laurient, one of the northern provinces of France. I have said that the sanitary condition of the United States in general is excellent, and this is more especially true of the large cities. Since the great source of infection is the water used for drinking it is around this that the most stringent safeguards should be thrown. This has been fully recognized in the larger cities, and thanks to the energetic work of the various boards of health there is little or no cause to fear as to pure drinking water. Sojourners at Summer resorts, however, should exercise particular caution, as the water used at these temporary places of residence is frequently contaminated, not at present with cholera germs, but with other germs of diseases which may weaken the system so as to afford a lodging place for cholera germs should these be introduced later.

That the health authorities of this city are able to combat the disease, even should it reach this country, a contingency which I scarcely class among the possibilities, was amply demonstrated in the way that the few cases were handled which appeared here last year, and further it may be said that the sanitary condition of this city now is better than it was then.

There are just three points to bear in mind:

First: that cholera can only be taken into the body by means of food or drink.

Second: that even if taken into a healthy stomach cholera germs are harmless as the acid gastric juice at once kills and digests them.

Third: that they are certainly killed when submitted to the boiling temperature.

Bearing these facts in mind and acting on them every person may face the problem "if the cholera comes" with equanimity, feeling assured of his ability to care for himself.

### The Pharmacy of emulsions

By WILBUR L. SCOVILLE, Ph.G.,

Massachusetts College of Pharmacy.

#### THE THEORY OF EMULSIFICATION.

The making of an emulsion, with a proper emulsifying agent, is almost as positive and certain an operation as the making of a 50 per cent. solution of a salt, or of any other simple mixture.

Let us first consider the theory of emulsification, then the practical operations involved in making emulsions of different kinds.

If we place half an ounce of a fixed oil, as cod liver oil, in a two-ounce bottle, add to it half an ounce of water and shake vigorously the oil is broken up into globules and diffused through the water, and the mixture has an opaque appearance. On discontinuing the agitation, however, the oil and water quickly separate into layers again. This is due to two causes: the lack of adhesion between the globules of oil and water, and the difference in specific gravity.

If now we place in another two-ounce bottle half an ounce of mucilage of acacia, turn the bottle so as to flow the mucilage around the inner sides, then add half an ounce of oil and shake vigorously, we obtain a whiter and more opaque mixture than before, which remains permanent for a period varying with the condition of the oil, the density of the mucilage, and the vigor of the shaking which we have given to it.

Here we have broken up the globules of oil as before, but we have also coated each globule, while in a fine condition, with a film of mucilage which forms a medium of adhesion between the oil and the water in the mucilage, and an emulsion ensues, although the difference in specific gravity is greater than in the first case.

The foundation of an emulsion, then, consists in breaking up the cohesion of the oil as much as possible and getting it into fine globules, which are then coated with a gummy or albuminous substance, as a pill is coated, whereby adhesion is established between the globules of oil and the water, and a homogeneous mixture results. If the globules of the oil are not small enough the cohesion of the oil will gradually re-establish itself, particle will coalesce with particle, until at length a more or less complete separation of the oil has taken place.

The permanence of an emulsion, then, consists in obtaining the globules of oil in so fine a condition that even a very thin mucilage can prevent their coalescing. These globules are ordinarily too small to be seen with the naked eye, but in emulsions made with thick mucilage, as mucilage of tragacanth, or mucilage of Irish moss, the globules of oil may be distinctly visible to the eye and yet the emulsion remain permanent, owing to the viscosity of the mucilage which envelops them. Such emulsions, however, will not bear very much dilution.

The best type of a natural emulsion is milk, in which the true emulsion portion separates as cream. When separation of this emulsion occurs, we obtain the fat as butter.

In triturating an emulsion, no pressure is needed, but a rapid motion is essential.

The pestle should be held loosely between the thumb and first two or three fingers, and the motion imparted to it by means of the fingers and wrist, as well as those of the arm and shoulder. This will be found much less tiresome than when the pestle is grasped firmly with the whole hand, and the motion imparted from the arm and shoulder alone.

#### EMULSIFYING AGENTS.

Emulsifying agents are chiefly albuminous, mucilaginous or alkaline in character.

In milk and yolk of egg we have good examples of emulsions with an albuminous agent; milk being an emulsion of butter fat with casein, and yolk of egg and emulsion of a peculiar fat with vitellin.

Casein has been recommended as an emulsifying agent. It is, however, not easily obtained, and when procured possesses no advantage over acacia. It is used in the same manner as dry acacia (which see).

Both milk and yolk of egg are used as emulsifying agents, and are unexcelled as such except as regards

keeping qualities. The propensities of milk to "sour," and of egg to become "stale" are well known, and these propensities are not changed by combining with them other fats or oils. But for emulsions which are to be taken immediately, nothing equals these agents for ease of manipulation or palatableness.

Both milk and yolk of egg being natural emulsions, we would naturally expect that they would be easy of manipulation when used as emulsifying agents. Not only is this true, but they also emulsify successfully a larger variety of fatty bodies than other agents.

Milk as ordinarily obtained, is seldom used except as a diluent. It is too weak of itself to be used to any extent as an emulsifying agent. The ordinary condensed milk of the market serves in this capacity admirably. This contains some sugar, which, however, does not interfere. In using it, the condensed milk is diluted with an equal bulk of water, then the oil is added in small portions, constantly triturating. Miss M. E. Bartlett, Ph.G., recently succeeded in emulsifying  $6\frac{3}{4}$  ounces of cod liver oil with 5 drachms of condensed milk, previously diluted with 5 drachms of water. This emulsion, containing about 84 per cent. of oil, was of the consistency of lard, and kept well for a month.

Glycerite of yolk of egg is an excellent form of the second to use. The oil should be added in portions to the glycerite in a capacious mortar, with constant trituration, and lastly the diluent may be added in the same manner. Both of these agents are used with excellent results for other bodies more difficult to emulsify than oils, such as creasote, chloroform, terebene, oleoresins, balsams, resinous tinctures, etc.

For ease of manipulation, for palatableness, and for general utility, yolk of egg and condensed milk stand first among emulsifying agents. Their tendency to spoil, however, condemns them for general use, since emulsions made with either seldom remain palatable for more than three or four days, and they are but little used. They have a special value, however, in emulsions of chloroform, creasote and other antiseptic bodies, the preservative properties of which will prevent any change for several weeks.

Either dry acacia or mucilage of acacia can be used for emulsions. Both have their advocates in point of preference, but in a wide experience with young men who were learning to make emulsions, dry acacia has proved itself a quicker and more certain agent to use, at least in the hands of novices. This is probably due to the fact that dry acacia must always be used in definite proportions, as must also the water added.

#### RULES FOR EMULSION MAKING.

Two rules are in common use for making emulsions with dry acacia.

**Rule 1.** For one part of gum, use three or four parts of fixed oil (2 or 3 parts of volatile oil) and once and a half as much water as gum. **Rule 2** varies only in using twice as much water as gum. The proportions of oil to gum vary with different oils; most fixed oils being emulsified well in proportion of four of oil to one of gum, while most volatile oils require one of gum to two of oil.

Suppose we wish to make a pint of 50 per cent. (by volume) emulsion of cod liver oil.

This will require 8 fluid ounces of oil, and by the rules every four parts of oil will require one part of gum; then the 8 fluid ounces of oil require 2 ounces of gum. Carefully weigh, then, the 2 ounces of powdered acacia, place it in a dry mortar having a capacity of 3 or 4 pints, and pour upon it the 8 fluid ounces of cod liver oil. Triturate lightly until the acacia is diffused evenly through the oil, which will be accom-

plished, in about a minute if both acacia and mortar were dry.

Now lift the pestle, and having carefully measured 3 fluid ounces of water (*Rule 1*), pour it all upon the oil in the center of the mortar, then triturate rapidly until a perfectly white, creamy mixture results showing no globules or color of oil. This is called a primary emulsion. Then add to this slowly, with constant trituration, water enough to make a pint of emulsion. This emulsion is of the color and consistence of thick cream, and is permanent.

In using mucilage of acacia, the mucilage is placed in a dry mortar, and the oil added in small portions, each portion being thoroughly triturated before adding the next. One ounce of mucilage will easily emulsify two ounces of cod liver oil, with the addition of a little water near the end of the emulsification.

Often a failure is made in this through the breaking of the emulsion while adding the last portions of oil. A little calculation will show the cause. One ounce of mucilage having a specific gravity of 1.25 will weigh an ounce and a quarter, and contain 34% of gum, or about 200 grains. This amount of gum will emulsify, according to the rule, about 13 drachms of the oil. Then after adding 13 drachms of oil to the mucilage, the remainder of the oil should be alternated with portions of water, as in making the 50% emulsion.

The following prescription, a favorite one in some sections, may be prepared in two ways.

|                    |     |
|--------------------|-----|
| Acacia pulv.....   | 10  |
| Sacchari pulv..... | 30  |
| Olei morrhue.....  | 60  |
| Aque q. s. ad..... | 120 |
| M. ft. emuls.      |     |

The surest way of obtaining a good emulsion from this, in the hands of inexperienced operators, is to make a primary emulsion, according to rule, with the acacia, 40 cc. of oil and 15 cc. of water. To this primary emulsion is added the remainder of the oil in portions, alternating with portions of water, and lastly the sugar dissolved in the remainder of the water.

Another way is to make a mucilage with the acacia and about 20 cc. of water; in this dissolve the sugar, and then triturate the oil in portions, as in using mucilage of acacia.

#### TRAGACANTH EMULSIONS.

Tragacanth is not often used alone as an emulsifying agent. It forms dense emulsions, which are too thick to be agreeable. It is often used with acacia as a means of cheapening the emulsion and also to prevent separation of the emulsion into layers by stiffening it. Various proportions of acacia and tragacanth may be used, made into a mucilage into which the oil is stirred as in using mucilage of acacia. One part of tragacanth alone will emulsify 15 to 20 parts of fixed oil. The following combination is a good one:

|                     |     |
|---------------------|-----|
| Acacia.....         | 4-4 |
| Tragacanth.....     | 6-3 |
| Olei morrhue.....   | 240 |
| Aque.....           | 120 |
| Syrup q. s. ad..... | 480 |

Mix the acacia and tragacanth with 60 of oil, add 24 of water and triturate until primary emulsion is found. To this add the remainder of the oil and water, and lastly the syrup.

Tragacanth is especially useful for suspending bismuth subnitrate and other heavy bodies, in mixtures. Condensed from *N. E. Druggist*.

**Hydrargyrum Thymolo-Aceticum**, when first offered, had assigned to it no definite formula, but is now claimed to be formed from two molecules of mercuric acetate, in which one acetyl group is replaced by the radical thymol, so that it has the following formula  $\text{Hg}(\text{C}_6\text{H}_4\text{O}_2)_2 + \text{Hg}(\text{C}_6\text{H}_4\text{O}_2)_2 (\text{C}_6\text{H}_4\text{O})_2$ .

# News and Notes.

## Pharmaceutical Association Meetings.

### MONTHLY CALENDAR.

| Date.      | Association.       | Place of Meeting. |
|------------|--------------------|-------------------|
| Aug. 14... | A. P. A. ....      | Chicago.          |
| " 15...    | South Dakota.....  | Yankton.          |
| " 21...    | Int. Congress..... | Chicago.          |

## Interstate Retail Druggists' League.

The officers of the Interstate League have recently issued a circular letter in which is succinctly set forth the duties of the State executive and local associations as under:

### DUTIES OF THE STATE EXECUTIVE.

The duties of the State executive committeeman is to endeavor to have every city, town or county organize a local association. Where the localities are too small for organization, it is suggested that steps be taken to organize the whole county and form a county association; have it elect officers and endeavor to get every druggist in the locality to join the association and comply with the duties of a local association toward the League. The executive committeeman will be supplied with all the necessary blanks and circulars and other matter necessary for such work. He is also requested to keep an itemized account of any additional expenses he may have had in carrying on his work and send the bill properly itemized to the secretary of the League, who will see that the amount is repaid the committeeman.

### DUTIES OF LOCAL ASSOCIATIONS.

The duties of the local associations or branches of the League is to have the respective localities form an association and endeavor to have every druggist become a member; elect officers; have the members agree to the objects of the League, and endeavor to have the signature or membership of at least 50 per cent. of the druggists in the respective localities. After the signatures of 50 per cent. have been secured send in the names with the necessary membership fee of one dollar *per capita* annually, after which the association as a whole become members of the League; then should any cutter and druggist exist in the locality who is demoralizing trade by cutting prices, get the names of each cutter and if possible the names of the parties from whom he purchases his goods, have the complaint properly signed by the president and secretary of the local association and forward same to the secretary of the League, who will report the same to the N. W. D. A. and have them placed on the cut-off list. The expenses of the local branches must be borne by the revenue collected by the local association. The dues ought to be replaced at such a figure that after paying the one dollar for each member to the League annually there should remain enough in treasury to pay all incidental expenses, such as postage and other matters. The remittance for membership should be made to the financial secretary, C. T. P. Fennel, Eighth and Vine streets, Cincinnati, Ohio. The list of names forwarded to Robt. J. Frick, secretary, Sixth and Chestnut streets, Louisville, Ky.

## Portland (Me.) Pharmacists.

The following members of the Cumberland County, Me., Pharmaceutical Association went to Mitchell's on the afternoon of July 25 on their annual outing:

J. W. Perkins, E. S. Everett, C. M. Hay, E. A. Hay, C. S. Foss, H. P. S. Gould, John Williamson, F. E. Fickett, L. C. Fowler, F. A. Turner, J. W. Butler, G. M. Young, D. W. Heseltine, A. S. Hinds, J. D. Dolan, C. M. Follansbee, F. B. Thompson, Clinton Gilson, B. A. Perkins, J. E. Gould, W. B. Hay, W. O. Alden, E. K. Guenther, J. M. Hammond, E. L. Foss, J. H. Hamel, J. B. Totten, O. E. Wood, C. F. Sawyer, E. W. Stevens, A. W. Smith, C. B. Woodman, W. I. Drew, F. W. Jewett, H. F. Merrill, J. O'Brien, E. J. McDonough.

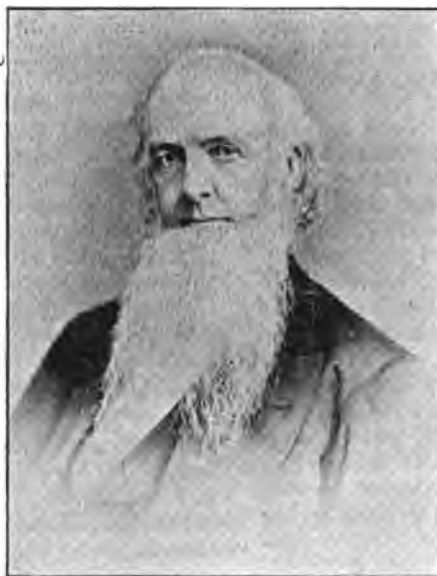
D. Wakefield, Lewiston; J. Forster, Sharp & Dohme, Baltimore; E. C. Mitchell; R. Libby; Dr. Myrshall, Parke, Davis & Co., Detroit; G. H. Davis.

At the business meeting the following officers were elected:

President—D. W. Heseltine.  
Vice-presidents—F. H. Wilson, Brunswick; W. O. Alden, Portland; L. R. Cook, Farmouth; J. C. Scates, Westbrook.  
Secretary—Geo. Merrill, Portland.  
Treasurer—J. Williamson, Portland.  
Executive Committee—C. M. Hay, E. L. Foss, E. K. Guenther, Portland; C. B. Woodman, Westbrook; A. W. Smith.

Baseball, football, handball and other sports filled the time until 5 o'clock, when a clambake was served. The outing was one of the most enjoyable in the history of the society.

The guests of the association were: B. Hyneman, Hyneman Bros., Boston; S.



Dr. Frederick Humphreys.

The gentleman whose features are portrayed above is probably one of the most widely known homoeopathic physicians in the United States as well as Canada and the South American Republics. Not alone through his connection with the Humphreys' Homoeopathic Medicine Co., but in great measure by his contributions to the literature of homoeopathy and general writings. Dr. Frederick Humphreys was born at Marcellus, N. Y., in 1816 and is thus in the 77th year of his age. On Tuesday, August 1, he celebrated at his country seat at Monmouth, N. J., the golden jubilee or fiftieth anniversary of his wedding to Frances Maria Sperry, of Ludlowville, and his house was on that occasion filled to overflowing with friends and invited guests. A particularly graceful feature of the celebration was the presentation of a massive golden loving cup filled with wine the gift of his eldest son, Dr. Frederick H. Humphreys. Referring to the literary work of the subject of this sketch it may be mentioned that his published writings cover a period of nearly half a century and as listed in Bradford's "Homoeopathic Bibliography" embrace sixteen titles, among the most interesting of which are his "Manuals of Specific Homoeopathy," his "Homoeopathic Mentor or Family Adviser in the use of Specific Homoeopathic Medicine," his "Manual of Veterinary Specific Homoeopathy." He was also editor of the *Specific Journal of Homoeopathy* from 1855 to 1863.]

## Pan-American Medical Congress.

A section on materia medica and pharmacology has been organized under the executive presidency of Prof. Joseph P. Remington, with Prof. F. G. Ryan, 3739 Brown street, Philadelphia, as English-speaking secretary. This section promises to be one of the most important of the entire congress. Delegates have been invited from all the pharmaceutical associations and colleges in all the Americas. Those contemplating attendance are invited to prepare papers on pharmaceutical topics. Titles should be sent at once to Professor Ryan, secretary.

The congress will convene at Washington, D. C., on Tuesday, September 5, and end on Friday, September 8.

An annual meeting of retail druggists of San Francisco was held Wednesday, July 19. The election of officers for the year resulted in the following named gentlemen being selected: President, J. E. Calegaris; first vice-president, S. de Nola; second vice-president, James Wingate; treasurer, C. S. Barington; secretary, O. A. Weihe; executive committee—P. A. Dubois, Frank Clough, E. W. Gane, A. H. Smith, C. M. Troppmann.

## Meetings of Boards of Pharmacy.

### AUGUST.

11, North Dakota—Fargo.  
11, Wisconsin—Fond du Lac.  
15, New Jersey—  
15, Ohio—Toledo.  
20, Michigan—Marquette.

## Iowa Board of Pharmacy.

The following named persons have passed examination before the State Board of Pharmacy, and received certificates: H. M. Griffin, Ft. Dodge; G. A. Grimm, Dubuque; A. W. Burrett, West Union; H. B. Harrod, Montezuma; Geo. W. Ball, Perry; Geo. W. Dixon, Colfax; C. P. Carman, Cedar Rapids; L. C. Hamilton, Clarion; J. D. Torrence, Kamrar; V. P. Olney, Shell Rock; Fred Guthrie, Tripoli; Charles A. Reed, Gladbrook; Walter T. Sidon, Des Moines; T. R. Sutter, Burlington; A. C. Zaiser, Burlington; J. W. Pennebaker, Coin; and J. S. Elerick, Keosauqua. There were besides these seventeen applicants who failed to pass the examination.

## Pennsylvania Board of Pharmacy.

The State Pharmaceutical Examining Board of Pennsylvania held an examination in the High School at Williamsport on Monday, July 17.

Sixty-nine candidates appeared for examination, forty-six applying for registered pharmacist's certificates, and twenty-three for qualified assistant's certificates. Twenty-five of the former and thirteen of the latter class were successful.

The next examination will be held at Philadelphia and Pittsburgh in October. Applicants for examination should apply

o the secretary of the board, Charles T. George, Harrisburg, Pa., after the middle of September, for the necessary blank form of application, and the exact time and place of the examination. Applicants should always state, when applying for blanks, for which certificate they wish to be examined.

### California State Board of Pharmacy.

The following is a list of names of the successful applicants at the examination held July 13, 1893.

#### ASSISTANTS.

Richard J. Dowdall, Max Lichtenstein, Jr., Leo Muntor, San Francisco; Edward S. Heberd, Willows; John McLaughlin, Amador City.

#### LICENTIATES.

Chas. E. Hill, Carl Andersen, Frank H. Wilson, E. R. L. Bare, Henry Hurrell, San Francisco; Edgar Richardson, Yuba Bill; F. V. Baer, Berkeley; F. V. Bacon, Weimar.

### Graduates of the Louisville College.

The twenty-third annual commencement of the Louisville College of Pharmacy was held at Harris' Theater, Louisville, on July 11. The Rev. Carl J. Zimmerman delivered the invocation. The salutatorian was J. T. Boulton. Henry S. Cohn, Ph.G., delivered the alumni address.

The graduates were Edward G. Birdsong, O. L. Brashear, C. S. Clay, G. H. Hoffman, C. A. Haerberle, Jr., A. Habich, F. Loyd, W. H. Moores, T. E. McNamara, T. L. McCrutchin, G. P. Powell, G. L. Ringo and T. C. Zimmerman.

The prizes offered for the highest average in the different branches were awarded as follows:

The chemical laboratory prize, given by Arthur Peter & Co., was awarded to Fred Loyd, of Texas, his average being perfect.

The prize given by Renz & Henry for the best average in pharmacy, the materia medica prize given by the Robinson-Pettett Company, and the alumni prize, a gold medal, given for the best general average, were awarded to George Hoffman, of Indiana.

Gold medal, given by E. C. Pfingst for the second best average, was awarded to T. E. McNamara, of Kentucky.

The Juniors who received certificates to enter the Senior class next session were H. Baas, Lee Farris, Will G. Pfeiderer, L. P. Chelf, Joe E. Duch, S. J. McMahon, J. W. Baird and E. G. Glover. The gold medal given by Dr. Wiley Rogers and M. Cary Peter for the best general average in the Junior class was awarded to H. Grass, of Kentucky.

Dr. Dudley S. Reynolds addressed the class.

The degrees were conferred by Dr. J. W. Fowler, president of the college; the prizes by Fred C. Miller, secretary of the college, and the alumni prizes by Dr. Albert Muench, Ph.G. The presentation from the class of 1893 was made by S. C. Zimmerman, Ph.G. The valedictory was delivered by David L. Ringo, Ph.G.

### U. S. Pharmacopoeia 1890.

In response to inquiries received from a number of readers regarding the probable date of publication of the new pharmaco-

poesia, we would state that the book will in all likelihood be received from the printers about August 15.

Although it forms a more bulky volume and has cost more to publish, the Committee on Revision has arranged to furnish it at a lower price than that charged for the edition of 1880.

The new edition will be sent out in dif-

### Dr. Friederich Witte.

Dr. Friederich Witte died at his home in Rostock, Mecklenburg, Germany, on Saturday, July 29.

Dr. Witte was born in Rostock, on February 28, 1829, and was thus in his sixty-fifth year.

He received his early education at the gymnasium of his native town and took a university course graduating with the degree of doctor of philosophy. He conducted a pharmacy in Rostock from 1854 to 1865, when he retired from the retail business, devoting his energies to the manufacture of fine pharmaceuticals on a larger scale. He has steadily enlarged his plant since 1856, when he first began manufacturing, and at his death had a laboratory in Rostock, and also one in Bramow near Rostock.

Dr. Witte was an original investigator and freely gave the results of his researches to the pharmaceutical world through the medium of the technical press. He devoted much time and study to the digestive ferments and originated the pepsin test in-



DR. FRIDERICH WITTE.

corporated in the "Arzneibuch für das Deutsche Reich" [the third edition of the German Pharmacopoeia]. Dr. Witte held the value of pepsin to be dependent upon its ability to do the prescribed work under the conditions existing in the stomach. As food should on an average be digested within three hours after ingestion, he based the tests applied to his own products to the work accomplished within that time, though in the German Pharmacopoeia test the time limit is put at one hour. His investigations were not, however, confined to this one line, though his most important work was done in this direction. Aside from his work as a chemist, Dr. Witte took a prominent place in the affairs of business and State. He was one of the founders and chairman of the General Board of Trade of Mecklenburg, and a member of the Committee of the German Board of Trade. He was also a prominent member of the *Freisinnige* party, and served as a member of the German Diet, representing the second election district of Meiningen from 1878 to 1881, and again from 1884 until the dissolution of the people's representation on May 6 of this present year. During his term of office Dr. Witte was ever the able champion of the cause of pharmacy and was able to render that cause signal service on many occasions. The doctor had visited this country several times, and when at Washington was extended the privilege of a seat on the floor of the House, while the President also showed him special courtesies. His last visit was on the occasion of the opening of the Columbian Exposition, which he attended officially as a member of the German Fair Commission. He became ill while there, which illness caused his early return home, and eventually terminated in his death.

ferent styles of binding, and printing, and the price at which we will be glad to receive orders and transmit the book to readers of the DRUGGIST AND RECORD

Muslin bound.....\$1.50; By mail, \$2.77  
Sheep..... 3.00; " " 3.27  
Interleaved..... 4.00; " " 4.50  
Printed on one side only, the left-hand pages containing text and the right-hand pages being blank.....\$3.50; By mail, \$3.90

No charge is made for delivery to jobbers in the city to be packed with other goods.

Payment must accompany the orders, which will be filled in rotation as received. Orders should be addressed and checks made payable to the American Druggist Publishing Co., at 37 College place New York City.

### The Apothecaries Union and the N. W. D. A.

The following correspondence has been published by M. N. Kline, chairman of the committee on proprietary goods.

Mr. M. N. Kline, 420 Arch street, Philadelphia:

DEAR SIR: At a meeting of the Board of Managers of the Apothecaries' Union, Limited, held on Monday, July 10, the following communication was directed to be sent to you as the official head and leading spirit of the Committee on Proprietary Articles of the N. W. D. A.

We feel that the time has now arrived when we should take some decided action in regard to what the Wholesale Association seem bent and determined to accomplish, if they can, in the way of crippling the freedom of action on the part of retail druggists, whereby it is intended, should the plan laid out in your circular of June 14 succeed, to compel all retail druggists to pay tribute to the wholesaler without any justifiable reason or cause.

While we do not assume to believe that you are entirely responsible for all that is done by your association, yet we are forced to the opinion that since the issue of your last circular over your signature as Chairman of the Committee on Proprietary Goods of the N. W. D. A., you have again assumed voluntarily the position of an enemy to the retail druggists.

You will remember that some years ago your position and action in regard to the rebate plan were not looked upon in any other light than of antagonism to the retail apothecary, and you will know that you did all that was possible to embarrass the Apothecaries' Union.

As you have continued in the position of Chairman of Committee on Proprietary Articles in the N. W. D. A., and also have been its resident one year since that time, knowing full well that not only the Apothecaries' Union, but also the retail druggists generally are opposed to any such plans or methods as have been proposed by your association, we now, as Managers of the Apothecaries' Union, Limited, feel that in order to be consistent with our position we must withdraw our patronage from the firm of Smith, Kline & French Co., or at least a large part of it, until such time as we are made to feel that we are in the hands of our friends instead of being knifed by one of the prominent members of this firm.

Respectfully yours,

A. T. POLLARD,  
Secretary Apothecaries' Union.

Mr. Kline sent the following reply on July 20:

Mr. A. T. Pollard, Secretary Apothecaries' Union, Limited, 1009 Spring Garden street, Philadelphia, Pa.

DEAR SIR: I am in receipt of your communication of the 11th instant, which you state you were directed to send me by action of your Board of Managers at a meeting held on the 10th inst. After carefully perusing this letter I am unable to make out whether it is intended as an official protest against the recent action of the Committee on Proprietary Goods of the N. W. D. A. at its meeting in Detroit in May last, for which it appears I am held personally responsible, or whether it is intended solely as a notice served upon me that unless I change my course as chairman of this committee, the corporation with which I am connected is to be boycotted by your board of members as far as you can influence such action.

In either case, however, it calls for a reply, and I am glad of the opportunity to call your attention to several glaring inaccuracies in the views expressed in this communication which are evidently held by at least some of the members of your board.

Let me preface this by stating that I not only fully recognize your right to criticize any action of the committee, but all the members of the committee. I know, cordially invite criticism of this plan proposed at the Detroit meeting.

It was devised in the interest of retailers as well as wholesalers, and if either the former or the latter believe it will not so result they should promptly

and frankly criticize it so that the committee can be guided in its further action. Unless it can be shown to be for the greatest good of the greatest number, success cannot be hoped for.

In this connection it will doubtless interest you to learn that at least some representative retailers differ radically from the views entertained by your board upon this particular action.

I recently received a letter from Mr. Chas. E. Ink, of Columbiana, Ohio, who was one of the three retailers appointed by the A. P. A. committee three years ago to act upon what was known as the Tripartite Committee to perfect a plan for the protection of retailers in their sales of patents. He has given, it is fair to presume, at least as much thought to this subject as the members of your Board.

(Here follows the letter of Mr. Ink, approving of Mr. Kline's course.)

I also learn unofficially from a letter written by Mr. Henry Canning, President of the Interstate League of Retail Druggists of the United States, to a member of our committee that at the last convention of that body, held in the city of Chicago, in May of this year, they adopted the following resolution:

"Resolved, That we request proprietors to sell their goods through wholesale or jobbing druggists only."

From this you will observe that there is a difference of opinion among retailers upon the question as to whether it is wise or otherwise for proprietors to adopt the Detroit plan.

Those quoted above evidently do not share with you the feeling that the Wholesale Association "is determined to cripple the freedom of action of the retail druggists" excepting so far as such a course will be necessary for the best interest of all by supplying some measure of relief against the cutting evil.

But now to set you right upon several points. Your letter indicates that the members of your board who dictated it are either malignantly prejudiced or grossly ignorant of the facts in the case. You say:

"While we do not assume to believe that you are entirely responsible for all that is done by your association, yet we are forced to the opinion that since the issue of your last circular over your signature as Chairman of the Committee on Proprietary Goods of the N. W. D. A. you have again assumed voluntarily the position of an enemy to the retail druggist."

Your Board of Managers certainly do not wish me to infer that they are not sufficiently versed in the rules governing parliamentary bodies, and committees appointed by them, not to know that the action of a committee controls the chairman, and whether he favors it or not he is bound to promulgate and advocate it if so directed by a majority vote.

The Detroit meeting of the committee was attended by fifteen of its members. I am not at liberty to divulge the details of its proceedings, but I can state that I neither originally favored the call nor proposed the plan finally adopted, but that it found almost unanimous favor at the hands of those present, and that I did, and do believe it to be wise and proper and timely action both for the retailers and the wholesalers.

I advocated getting an expression of opinion from retailers as the first step. The opinions above quoted show that in this view I was not mistaken. In the quotation from your letter just cited I am accused of "again assuming, the position of an enemy to the retail druggists. When, pray, did I assume a similar position previously? Was it when, in 1883, I championed the Campaign plan for the protection of retailers, and in its interest, as is well known, spent about two hours each day during its existence, for about a year?

The downfall of that plan, I might here state, was hastened by some of the very people who are now still in the interest of their friends and only patrons, the cutters, treacherously planning to undermine my influence in this work, and using some of the members of your board as catspaws to pull their chestnuts out of the fire, as they fully realize that they have no standing whatever among an honored class of dealers, whose enemies they have always openly been.

Or, was it while advocating any of the other numerous plans to which I from time to time gave much thought and attention with the hope of checking this evil, which I clearly foresaw threatened the interests of our best friends and patrons, the retail druggist? A still more glaring misconception of the facts is contained in that part of your letter where you assume that my action dominates and controls that large, respectable body of enterprising, practical, and fair-minded merchants, composing the membership of the N. W. D. A. I am proud to be a member of such a body and glad to feel that I have some influence with the association, but it is not controlled by any bosses, as you can readily learn for yourselves, if you will send a delegation to its next annual meeting.

A further error is made in stating that I know full well that since I have been Chairman of the Proprietary Committee (now nearly six years) not only the Apothecaries' Union but retail druggists generally have been opposed to any such plans or methods as have been proposed by our association.

What I do know is quite the contrary. Cutters and their allies are the only ones who were opposed to these plans. Our association was organized for the protection of its members, and those familiar with its history will admit that it has been fairly successful in its purposes, but it has not lost sight of the interests of allied branches, particularly so with regard to retail druggists. Commencing with

the very first meeting of this association after it was made National, which was held in New York City in 1883, to the very last, held in September last in Montreal, large delegations of retail druggists were received and welcomed by our organization.

During the meetings at Washington, Louisville, and Montreal more than half its entire time was freely given to considering plans offered by retail delegations for the amelioration of the condition of retail druggists and discussing the same. The time of the committee of which I have been chairman has been likewise, between meetings, freely given in trying to solve the vexed questions of how to help the retailers in their fight against the ruinous cutting evil.

More money has been voted by our association to this same work than was ever devoted to the purposes of establishing the rebate plan for the benefit of its own members, the jobbers.

And now as to this last meeting and the plan recommended by its action. For two years the retail druggists of the West have valiantly fought to keep cutters, just invading that territory, from getting any foothold and asked jobbers to refuse supplies to them. The members of the N. W. D. A. have almost to a man loyally seconded these efforts and refused to have any dealings with cutters.

One wholesale house alone defied the retailers of that section. That was a firm in Cincinnati, Ohio, who are not members of the N. W. D. A. They could not purchase rebate goods direct, but they continued to supply them freely to cutters and others.

Upon each investigation made it was found that this concern obtained its supplies largely through retail druggists and this was one reason which influenced the committee to adopt the Detroit plan. The other was that many years' careful study of members of our committee that supplies could not be kept out of the hands of the cutters.

I have for some years past felt that all that could be done was to make the cost to retailers uniform. This is precisely what the Detroit plan means if it should be adopted by proprietors, and in the success of this the members of your organization are as much interested as any body of retailers I know of.

Referring to that portion of your letter wherein you say:

"You will remember that some years ago your position and action in regard to the rebate plan were not looked upon in any other light than as antagonism to the retail apothecary, and you will know that you did all that was possible to embarrass the Apothecaries' Union."

I do well remember what you refer to, particularly so as, although the action to which you object was taken at the unanimous request of the wholesale druggists of this city and bore the signature of each firm as well as that of ours, a few of our very good friends, or at least their representatives, gave your members to understand that the action was my individual action, and their signatures to the paper were attached "to help me out." If any members of the wholesale trade here are opposed to the rebate plan I have not been advised who they are.

Your members undoubtedly are opposed to the rebate plan, but they are intelligent men, and hence will not for a moment seriously claim that purchasing, as you proposed, for division among your members at cost, was in accordance with the letter and spirit of that plan, and that, therefore, the members of the wholesale trade here, and not only the chairman of their association's committee, could not approve of such a proposition, though their very best friends and customers favored it and were interested in it.

And is this not the "head and front of my offending?" You well know it is. There has been no "knifing." The action taken was and is in the interest of all wholesalers and there is no credit due those who insidiously attempt to make it appear otherwise and, while sharing its benefits, favoring its enforcement, shirk its responsibilities.

The one action officially taken at the request of all the jobbers which interfered with your project was entirely consistent with my whole course, could not be otherwise occupying the official position I feel honored in occupying, and for this I do not for one moment make any apology, but a moment's reflection will show you the injustice of attempting to place the blame, if any blame is deserved, upon the official mouthpiece instead of all the members of the body advocating it.

As to the closing paragraph of your letter, which is the boycott portion of it, I desire to say that I supposed your organization was conducted upon merely business principles and that your purchases of supplies were made from such houses as offered them at rates most advantageous to you. If this is so we shall still hope to deserve at least the consideration our position in the trade commands.

I am and always have been willing personally to do anything within reason and proper business and moral principles to deserve a continuance of our relation with the valued members of your body.

An intelligent study of the situation as it is, and not as some of your members have been led to believe it to be by interested parties, will probably convince the fair minded and reasonable members of your board that you are likely to be in the "hands of your best friends" when dealing with those who advocate what they believe to be right, openly and in a manly way.

My desire to present a full and detailed statement of the facts to your board must be my apology for so lengthy a communication. As the action of your body and the talk resulting from it have done much

to place our corporation in a false light, I shall make a copy of your letter and this reply and in circular form mail to each druggist in this city, so each can judge for himself as to the merits of the controversy which, believe me, has not been of my seeking.

Yours truly,  
M. N. KLINE.

### The Rebate Plan.

As the replies to the former circular were not considered sufficient, M. N. Kline, chairman of the N. W. D. A. Committee, has sent out the following:

PHILADELPHIA, July 18, 1893.

To Proprietors Selling under Rebate Terms:

GENTLEMEN: I regret that a very few of the proprietors addressed by me in behalf of our committee, under date of June 14, have favored me with an expression of opinion upon the plan brought to their notice at that time, and which we feel must in some form, even if modified, be agreed upon if we hope to successfully continue rebate protection.

Proprietors owe it to themselves and the dealers who handle their articles, both wholesale and retail, to express themselves pro or con upon this subject.

In this connection, I deem it important to bring to your attention an extract from a letter received by me from Mr. Charles E. Ink, of Columbiana, Ohio, in reference to this plan. Mr. Ink, as many of you may remember, was a member of the Tripartite Committee, three of which committee were appointed by the A. P. A. committee, at the Washington meeting of the N. W. D. A., and may properly be classed as a representative retailer.

I am also informed, unofficially, that the Interstate League of Retail Druggists of the United States, at its recent convention in Chicago, voted to "Request proprietors to sell their goods through wholesale and jobbing druggists only." This, it appears to me, clearly indicates that retailers who have carefully studied the situation appreciate the necessity of restricting sales of contract articles to channels that can be controlled under contract.

My object in sending the present circular, however, is mainly to bring to your notice the importance of making special efforts to stop the free supply of rebate goods to the particular firm in Cincinnati which has, for years, openly defied your terms. Their offers to sell rebated articles at a discount have become more open and more frequent, and competing jobbers feel that they have a right to insist that either this be stopped or they be released from present conditions following your sales to them.

It is manifest that a feeling of indifference, concerning the continual violations of contracts by this firm, has taken possession of many manufacturers whose names now appear on our official rebate list; and that many, if they do not fill the orders of this firm direct, let supplies go to retailers who are known to turn them over to this concern at cost, or fill orders from "straw buyers" accompanied with the cash and "no questions asked."

Only a few years ago this firm acknowledged that its supplies were so seriously interfered with that they felt that if you persisted in your earnest course they would be compelled to accept and be bound by your terms. Recently they boast that they can and do get all the goods they require. The present situation is critical in the extreme, and unless it can be promptly and effectually changed must result in entirely breaking down all efforts to control selling prices of proprietary articles.

Are you prepared for this? If not, will you not with renewed vigilance scan your orders, and take such determined and decisive steps as will actually control the sales of your preparations and will insure the final overthrow of all opposition to your terms?

Note carefully the petitions from the O. K. & I. Exchange and the Lake Erie Drug Exchange, copies of which appear on the next page of this circular.

Please advise me, for the committee, whether you will co-operate with us in one more united effort to stop this open and continued violation of your terms.

Upon your answer will be based my report at the coming meeting of our association, as to whether your name should be continued upon our official list of articles actually controlled under the rebate terms.

Your early answer will greatly oblige,

Very truly yours,

M. N. KLINE, Chairman.

### Action of the O. K. & I. Exchange:

Mr. M. N. Kline, Chairman Proprietary Committee N. W. D. A., Philadelphia, Pa.

Louisville, Ky., June 29, 1893.

DEAR SIR: At a meeting of O. K. & I. Exchange, which is composed of all the jobbing druggists of Indianapolis, Columbus, Cleveland and Louisville, held this day the resolutions passed at Detroit by your committee were heartily indorsed. The manufacturers respectfully urged to adopt plan therein suggested. During the discussion upon the question the fact was developed that the regular competition emanating from Cincinnati has extended to the entire line of goods usually handled by wholesale druggists—pharmaceuticals, essential oils, chemicals, sundries, etc. The ignoring of prices on contract goods has been allowed, and proprietary goods have continued to flow in so freely to the hands of these people that they openly boast that they can readily obtain all needed supplies. The situation has be

come so serious that, unless some decided relief can be promptly afforded to those who are in honor bound to maintain contracts, while this competitor seems free to ignore them, this exchange will be forced to meet this competition or lose their entire clientele. We would therefore respectfully urge that you present these facts to the manufacturers and ascertain from them how many, if any, will adopt the plan suggested at Detroit and enforce their contracts against cutters—sustaining those who heartily co-operate with them in preventing the demoralization which now exists. If proprietors will adopt the plans suggested in the Detroit resolution, and sell only to such jobbers as are recommended by the Proprietary Committee, in our opinion the existing evil will readily be overcome.

Respectfully,  
ROBINSON-PETTET Co.,  
RENZ & HENRY,  
NEAT-RICHARDSON DRUG Co.,  
ARTHUR PETER & Co.,  
THE STANDARD DRUG Co.,  
THE STEIN-VOGLER DRUG Co.,  
HALE, JUSTIS & Co.,  
LLOYD BROS.,  
BENTON, MYERS & Co.,  
STRONG, COBB & Co.,  
WALDING, KINNAN & MARVIN,  
A. KIEFER & Co.,  
DANIEL STEWART,  
WARD BROS.,  
INDIANAPOLIS DRUG Co.,  
OHR, BROWN & PRICE,  
THE KAUFFMAN-LATIMER Co.

### Resolutions of the Lake Erie Drug Exchange:

GRAND RAPIDS, Mich., July 6, 1893.

M. N. Kline, Chairman, Philadelphia, Pa.

DEAR SIR: At the meeting of the Lake Erie Drug Exchange, held in Cleveland recently, the following resolution was unanimously adopted:

Resolved, That the Lake Erie Drug Exchange feeling that, on account of the cutting of rebate prices by a prominent firm in Cincinnati, Ohio, the rebate plan is in jeopardy. That it affects more than the local trade in Cincinnati, and is becoming widespread. That this exchange requests the Chairman of the Proprietary Committee of the National Wholesale Druggists' Association to take some action at once for our relief, and that unless some action is taken at an early date we sincerely believe that the rebate plan will be of short duration.

Yours very truly,

H. B. FAIRCHILD,  
Secretary.

#### Members:

Williams, Davis, Brooks & Co., Detroit.  
T. H. Hinchman & Sons, Detroit.  
Farrand, Williams & Clark, Detroit.  
Benton, Myers & Co., Cleveland.  
Strong, Cobb Co., Cleveland.  
Walding, Kinnan & Marvin, Toledo.  
West & Truax, Toledo.  
Hazeltine & Perkins Drug Co., Grand Rapids.

### New York Notes.

Allaire, Woodward & Co., manufacturing pharmacists and importers of Peoria, Ill., have selected a New York and Eastern representative in the person of Geo. A. Wasson.

The Chevalier Aristide Leonori and Prof. Salvator Leonori, both of Rome, Italy, are spending a short time in New York. Both gentlemen are widely known in Italian scientific circles.

George Yost, of the Bellaire Bottle Company, Bellaire, O., passed through New York City a few days ago. The company with which Mr. Yost is connected make a specialty of druggists' glassware, and have a reputation for excellence of design in druggists' shop furniture bottles.

The many friends of Wm. H. Madison class of '89, N. Y. C. P., who has been connected for some time past with the Bolton Drug Co., Brooklyn, will be glad to learn of his appointment as instructor in pharmacy under Professor Coblenz at the New York College of Pharmacy. Mr. Madison combines with a good theoretical knowledge of pharmacy an intimate acquaintance of the subject in its practical aspect and will bring to his new duties the fruits of quite an extended experience of the business needs of a modern pharmacist.

Messrs. Ritzhaupt and Meissner, two tourists, with a World's Fair visit incidentally, arrived here on Thursday the 3d inst., by the "Augusta Victoria." Both gentlemen are leading citizens of Leipsic. Mr. Ritzhaupt is managing partner of the great essential oil house, E. Sachsse & Co., and also interested in machinery works at Hamburg with large South American export interests; he has been in America three times before—27 years ago when he visited many points in the Eastern and Middle States, going as far as St. Paul (which was little more than a village then, while Minneapolis consisted of only a few log huts, and New York extended to 59th street [Yorkville], with all beyond farmland and woods); and again in 1877, when he made two trips to the United States. His reminiscences are interesting, the more so as he is blessed with a tenacious and vivid memory. Mr. Meissner is a prominent druggist and editor of the *Drogisten Zeitung*, but more distinguished as a prominent official of the Leipsic city government, and an active promoter and developer of municipal interests. The gentlemen are making a circuit of the globe, their tour including New York, Niagara Falls, Montreal, Philadelphia, Washington, St. Louis, Chicago, St. Paul, Yellowstone Park, Yosemite Valley, San Francisco, Yokohama, Hong Kong, Madras, Colombo, to the top of the Himalaya Mountains, Calcutta, Bombay, Cairo, Alexandria, Naples, Leipsic, with many intermediate points. Their schedule, if adhered to, will bring them home on Dec. 25, Christmas day. During the preliminary stay in New York the gentlemen have been busy sightseeing, and Mr. Meissner's first report to his journal furnishes graphic descriptions of his general impression of New York City, including visits to notable buildings, a few business houses, Broadway and the business streets (where the bustle, hurry and volume of traffic astounded and mightily impressed him), museums, Central Park, the "L" roads, Fire Department, etc., a visit to the Catskills (Elka Park), Coney Island, etc. They commence their inland trip Tuesday, Aug. 8, exactly on schedule time. May the trip yield all the expected pleasure and recreation to both gentlemen. *Glückliche Reise!*

### Random Notes.

Dr. C. R. Knox is to open a store in the McDonald Building at Tremont, Neb., about July 15.

Emil J. Maring has purchased the pharmacy of Leon J. Pastor, cor. Dean and Sackett streets, Brooklyn.

### Pharmacies by Whipple.

C. P. Whipple, of 182 Hanover street, Boston, manufacturer of druggists' artistic fixtures, is attending to recent orders as follows:

One elegant new set in quartered oak and plate glass, for the State of Maine Eye and Ear Infirmary, at Portland, Me.; one in Mexican mahogany, for David F. Baxter, of Brookline, Mass.; one for W. Richardson, of Scituate, Mass., in oak; one for S. M. Irons, of Winthrop, Mass., in oak; one for J. C. Kennedy, of New Bedford, in oak; one for A. W. Sawtelle, of Hartford, in elegant white quartered oak; one for J. W. Wilson, of Boston, in oak.

He has also just completed a beautiful drug store, in quartered sycamore, for G. L. Hitchcock, of Keene, N. H., of which this gentleman speaks in terms of unqualified approval.

### Notes on the A. P. A. Meeting.

The committee on arrangements of the A. P. A. announces the following programme for the entertainment of visitors:

Monday evening, August 14—Reception to members of the A. P. A., given by the druggists of Chicago.

Wednesday evening, August 16th—Banquet.

Saturday morning, August 19th—Excursion on Lake Michigan to Lincoln Park and the World's Fair.

Monday, August 21st—Reception to the foreign guests of the A. P. A.

In addition to the above the Chicago Apothecaries' Society will give a banquet to the old and new officers of the A. P. A., the foreign guests and the other distinguished visitors, on some evening which has not yet been determined upon during the week of the International Congress.

### OBITUARY.

D. R. DYCHE.

D. R. Dyche, whose name has been brought prominently before the attention of pharmacists through his position as committeeman of the International Pharmaceutical Congress and chairman of the board of trustees of the Northwestern University (Department of Pharmacy), Illinois, passed away at his home in Evanston, Ill., on Friday, August 4. The deceased had only been sick a few days. The immediate cause of death was septic meningitis, brought about by infection from a small carbuncle which appeared on his upper lip about ten days before his death.

D. R. Dyche was of German descent and was born on a farm near Lebanon, Warren County, O., March 11, 1827. When he was 14 years old, his father died, and after that time his education was shaped by his mother. He entered the Ohio Medical College when he was about 20 years old and after graduating became an interne at a Cincinnati hospital. After practicing medicine for some time at Monroe, O., he moved to Chicago, where he took up the drug business of his brother, the late General Dyche, and gave it his sole attention. The establishment conducted at State and Randolph streets was one of the best known in the city.

Although Dr. Dyche never distinguished himself by original research nor by contributions to pharmaceutical literature, he was nevertheless active and diligent in movements having for their object the betterment of pharmacy both in Chicago and the State of Illinois. His loss will be severely felt by his associates in the School of Pharmacy of the Northwestern University, of which, as remarked above, he was a trustee, and not less so by Chicago pharmacists, among whom he was widely and favorably known. He was a man of considerable religious feeling and was fearlessly honest in his opposition to fraud and wrongs.

Dr. Dyche leaves a widow and two sons. One is William Dyche, associated with his father in the drug business, and a member of Evanston's city council. Another and younger son, George, is studying medicine.

# COLUMBIAN EXPOSITION

## Agricultural Buildings.

(Continued)

### SECTION G.

Mexico has also an exhibit of wines and brandies. Among these are Aguardiente de Cano, a liquor distilled from fermented sugar cane; vini de uva, a wine of barberry berries; mescal, a liquor prepared from the century plant; vino blanco, a white wine; vino tinto, a claret wine, etc.

In the French exhibit previously alluded to are 202 individual exhibitors, the whole occupying the southeastern portion of the court.

### THE GALLERY.

In the gallery is the exhibit of Portugal consisting principally of port wine, another portion of the Spanish and French exhibits, and the exhibits of Italy and Greece. The platform on which the exhibit of the latter country is situated is faced with white Corinthian columns and thus attracts attention from a distance, but the arrangement of the exhibit is not such as would appeal to the artistic sense of the eye.

### NEW YORK CONDENSED MILK CO.

The exhibit of this company which occurs in this section is one of the most attractive from an architectural point of view in this section, in proportion to its size. An idea of the design of the booth can be obtained from the accompanying illustration, but the fine effect of the ivory and gold finish of the booth cannot be shown in the mere black and white of the illustration on the following page.

The exhibit comprises the Gail Borden "Eagle Brand" condensed milk and also Borden's bottled milk.

The figures at each of the corners show the four seasons while the medallions above give a faithful reproduction of the strong features of the old inventor himself.

St. Charles Evaporated Cream Co., of St. Charles, Ill., evaporated cream. Nestle's Milk Food.

### EXHIBITS IN SECTION H.

E. B. Millar & Co., of Chicago, spices commonly handled by druggists, viz., black, long, and red pepper, coriander, etc.

Krembs & Co., retail druggists, of Chicago, chicory root, whole, sliced and ground, also the roasted root sliced and ground, and chicory extract.

Lockhart Chemical Co., of New York, flavoring extracts of banana, orange, mace, nectar, raspberry, lemon, etc., also wild cherry phosphate and ginger ale.

Near by are a number of booths exhibit-

### SECTION I.

This section has the odd distinction of exhibiting in combination, two articles used as luxuries, which are the direct physiological and physical antitheses of each other. It is devoted principally to whiskies, mineral waters and products of the tobacco plant, such as cured tobacco leaves of various shades, cigars, cigarettes, plug tobacco, fine cut and snuff. Of the whiskies but a few would attract attention, such as the products of Rheinstrom Brothers, of Cincinnati, and the "Cream" pure rye of Dallemund & Co., of Chicago.

The array of bottled mineral waters commends attention by reason of its vastness, there being no less than twenty exhibiting firms. Beyond the fact that there are a large number of bottles containing water, there is nothing interesting in this portion of the Exposition. Among the waters shown are Manitou from Manitou, Col., Salutaris from St. Clair Springs, Mich., Poland from South Poland, Maine, Stafford from New Orleans, Sulpho-Saline from Excelsior Springs, Mo., Londonderry Lithia from Nashua, N. H., Setters and Imperial—artificial waters manufactured by John Morgan of New York, Buffalo Lithia from Virginia, Salvator and Allouez from Green Bay, Wis., Idanha from Salt Lake City, Castalia from California, Bowden Lithia from Lithia Springs, Ga., Waukesha Lithia from Waukesha, Wis., Blue Ridge from Virginia, and Crockett Arsenic Lithia from Roanoke, Va. Most of the mineral water firms also exhibit ginger ale made with the particular water sold by them. The most striking portion of the mineral water exhibit is that of the Londonderry Lithia Spring Water Co., which consists of a gigantic bottle surmounted by an immense corkscrew, the bottle being about twelve feet high and several feet in diameter. It is an enlarged fac-simile of the ordinary Londonderry bottle.

Other exhibits in this section are the butter colors made by Wells, Richardson & Co., of Burlington, Vt., J. S. Strickland, of Sterling, Ill., and Hansen's Laboratory of Copenhagen, Denmark, and little Falls, N. Y.

(To be continued.)



EXHIBIT OF THE NEW YORK CONDENSED MILK CO.

ing glues and gelatins of various kinds and forms.

Curtis & Sons, Portland, Maine, exhibit various kinds of chewing gums and the natural lump spruce gum as it comes from the gatherers, and they also show a section of a spruce tree.

G. F. Hooper, Sonoma, Cal., pure olive oil in bottles expressed from California olives.

## With the Advertisers.

### Brooklyn College of Pharmacy.

This institution, organized and maintained by the Kings County Pharmaceutical Society, offers excellent facilities for a thorough course in general and pharmaceutical chemistry as well as the other subjects included in a complete college course. A striking advantage possessed by this school is observable in the fact that the teaching faculty comes into direct personal touch with the students, and is enabled in this way to develop in the individual student latent capabilities that could not be brought out in the ordinary way.

Although extensive alterations are to be made in the laboratories before the opening of the next session, the accommodations are limited to sixty students and those who intend to matriculate for the session of 1893-4 should make early application to the clerk, Charles E. Knebel, Brooklyn College of Pharmacy, 399 Classon avenue, Brooklyn, N. Y.

In France, during the year of 1891, there were consumed, on an average per inhabitant, 937 grammes of tobacco. The diseases, resulting from the abuse of tobacco, are consequently very frequent in this country.

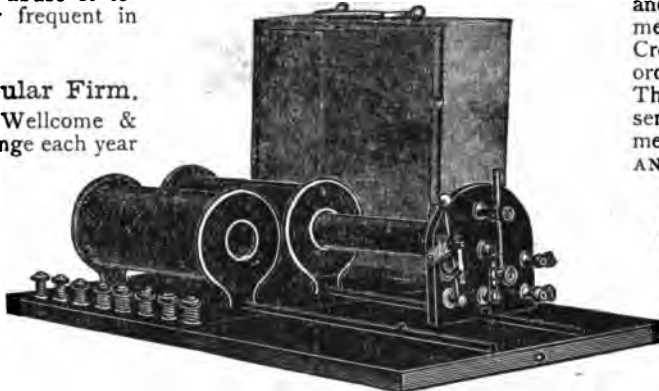
### A Generous and Popular Firm.

The firm of Burroughs, Wellcome & Co., Snow Hill, London, arrange each year for an excursion of their employees. This year the excursion took place on July 1, at Hastings. Dinner was served in one of the numerous halls of the town. The usual toasts were given, and the good feeling which exists between the firm and their employees was thoroughly exemplified by the applause which greeted Mr. Burroughs on his rising to reply to the toast of the firm.

In the course of his remarks, Mr. Burroughs bore willing testimony to the assistance the firm had received from the employees, and later on he announced that the percentage of the profits annually divided among the staff would be doubled at the next distribution, an announcement which was received with cheers, which were also freely accorded to a statement that the firm contemplated introducing the eight hours system into their works. Mr. Sudlow, the general manager, replying on behalf of the staff, briefly traced the growth of the business since the time when the staff consisted of five in all, and Mr. Burroughs would, when they were extra busy, assist the solitary packer. Mr. Searle, the Dartford manager, and Mr. Kirby, the cashier, also replied, the latter stating that the amount divided among the employees as their share of the profits amounted, at the last distribution, to nearly £1,800.

### Combined Faradic Coils.

The different qualities and therapeutic properties of the induced current as derived from different sizes and lengths of wire, was first recognized by Dr. Jerome Kidder, who was the pioneer in this work. Dr. Augustin H. Goelet, of New York City, has been giving the subject his attention lately, and in a paper read before the New York County Medical Society has fully explained the advantages of using wire of different lengths and thicknesses in the construction of secondary coils. With reference to the qualities of the secondary induced (faradic) current he states that the character of the current is varied, both by the number of turns or convolutions of the wire in the secondary coil surrounding the primary (whence it is derived by inductive influence), and also by the greater or less resistance offered by the length of the wire which the current traverses—this resistance being greater the longer and finer the wire, and less the shorter and coarser the wire. That is, upon the variation of the two qualities, electro-motive force and volume, depends the difference in its character



COMBINED FARADIC BATTERY OF JEROME KIDDER MFG. CO.

and in its therapeutic properties. The electro-motive force is increased by multiplying the number of turns in the secondary coil, and is diminished by reducing the number of turns. At the same time that the number of turns are multiplied, the length of the wire the current must traverse is increased, and with it the resistance, and the volume of the current is consequently diminished. When a fewer number of turns of wire are employed there is less electro-motive force, and, as the resistance in the coil itself is decidedly less, the volume of the resulting current must be greater, and in consequence it is more stimulating. In order to make the volume of the current still more pronounced, a coarser wire which offers less resistance is employed. Therefore, the current from a coil of long, fine wire is a current of higher potential or greater electro-motive force and less volume than that derived from a coil of short, coarse wire, which gives a current of more volume and less electro-

motive force, owing to the fewer number of turns.

The form of battery in use by Dr. Goelet is illustrated herewith and may be obtained from the makers, the Jerome Kidder Manufacturing Co., 820 Broadway, New York City.

### An "Edition de Luxe."

The Crown Perfumery Company have surpassed all previous efforts, and probably all competitors in their newly published catalogue of perfumes and toilet preparations. The catalogue is a veritable *Edition de luxe*, and is altogether too pretty and costly for general or indiscriminate distribution. It contains eight beautiful cards lithographed in colors which are real art gems. On these are depicted the various styles of packages, showing the natural color of bottle, box, and label. The specialties of the Crown Perfumery Co. include a series of perfumes, toilet waters, powders, soap, etc., with the distinctive titles of "Crab Apple Blossoms," "Gold Label Perfumes," "Violettes de Parme," "Matsukita du Japon," and "Fleur de Lys." A display of attractive and imposing appearance may be made by means of the large show bottle which the Crown Perfumery Co. furnish free with an order for \$50 worth of assorted goods. The catalogue mentioned above will be sent free on request to every druggist mentioning the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD.

### Duroy and the Duroy Wines.

The name Duroy, translated means: Du (of the) Roy (King)—O the King. This name, while of no special fame in France, is one of great note in this country. It is borne by a highly respectable family, who came to America many years ago and located in Cleveland, Ohio. The family consisted of father, mother and son. M. Duroy, the father, began at once the wine industry, and from his superior knowledge and skill, he produced wines of such excellence that they soon acquired a wide reputation, sold and known as the Duroy Brands. The son, M. Duroy, Jr., soon after entered as a partner under the firm title M. Duroy & Son, and the business prospered up to the death of the father, which occurred in October, 1876. For a time after the death of the father, there were no wines made until the son, M. Duroy, moved to his new vineyards at Lakeside, Ohio, in 1882. From that date up to 1888 he sold no wines direct to the trade, but distributed them through his agents, Benton, Myers & Co., from Cleveland.

The present partnership (Duroy & Haines) was formed in August, 1888. In October, 1889, the injunction suit which has been so thoroughly published in all drug journals of the country, brought by Benton, Myers & Co., druggists, of Cleve-

land, O., to restrain Duroy & Haines from using the words Duroy Wine Co. and Duroy Wines, was decided in the Common Pleas Court and affirmed in the Circuit Court. It allowed the former the title Duroy Wine Co., and the latter the title Duroy Wines. It has, however, been five years since Benton, Myers & Co. had a gallon of Duroy's wine.

### About Soda.

Druggists should sell nothing but the best—this applies particularly to soda, as cleverly pointed out by Hance Brothers & White in their page advertisement in this issue. Hance Brothers & White refer to the fact that their business is drugs. They make two or three thousand pharmaceutical preparations, which accounts for their frequent advice to druggists to serve acceptable soda water. Druggists that serve poor soda, it is averred, ruin their trade, which, of course, hurts the trade of Hance Brothers & White in drugs, chemicals and pharmaceutical preparations. We have long admired Hance Brothers & White's method of attracting the attention of retail druggists to the specialties handled by them, and we would join them in asking no American druggist to be a stranger to the excellent products of their house.

## Review of the Wholesale Market.

NEW YORK, August 8, 1893.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

The beginning of a new month has not developed any noticeable change in the situation of the market in so far as relates to the sale of drugs in full packages, but the distributive trade is reported as of better proportions, and a stronger feeling prevails. Among merchants, however, the belief is general that no lasting improvement in business can come about until a change takes place in the financial situation. As things are, it is difficult to make collections owing to the stringency of money. This, at the same time, is conducive to a general disinclination on the part of buyers to give their attention to quantity lots. The market is still somewhat weak and unsettled, and declines have taken place on a few important lines. Among these are: Camphor, Mace, Opium, Quicksilver, Saffron, American, and Yerba Santa. Caraway Seed, Large Flake Manna, and Shellac are firmer.

### DRUGS.

**ALCOHOL**, grain, finds steady consumption at unchanged values. We quote the range at \$2.18 @ \$2.22 as to quantity with conditional rebates. Wood, 95 per cent., is quoted \$1.40; 97 per cent., \$1.45, and Diamond Methal, \$1.50, with a discount of 2½ per cent., on 5 bbls. or more when taken in one lot.

**ARNICA FLOWERS** are maintained steadily at the range of 11 @ 12c., though a moderate demand only is experienced.

**BALSAMS.**—Balsam Copaliba, Central American, is not offered from importers' hands below 30c., though no business of any importance has been transacted within the past week. Fir is dull at nominally unchanged prices. Peru remains very quiet. The jobbing quotation remains \$1.35 @ \$1.50 as to quality and quantity,

Tolu is passing out in small quantities and held at 22 @ 25c.

**BARKS.**—Cascara Sagrada has improved in demand owing to recent advices from the Pacific coast. The prices ruling at the moment are, it seems, too low to cover cost of collection and the bark is not being gathered. Among recent sales are included 10,000 lbs. at 6½c.; 7c. is the figure now generally quoted. Cascarilla and Prickly Ash have been inquired for and we are reported sales at 6 @ 8c. for the former and 7 @ 9c. for the latter. Soap continues irregular owing to competition between rival holders from anxiety to realize. The competition upon cut and ground is especially sharp. The former is offered at 4 @ 4½c. for 50 barrel lots and ground may be had at similar figures.

**BUCHU LEAVES**, short, continue in moderate jobbing demand at 12 @ 15c. Long are held at 35c.

**CACAO BUTTER** is in firm position, but the demand is limited to jobbing quantities. The prices realized at last week's auction sales in Amsterdam and London were the equivalent in U. S. currency of 35½c. and 34½c. in each market respectively.

**CANTHARIDES**, Russian, are tending higher at primary sources owing to prospects of a poor crop. The price here is unchanged from 70 @ 75c. as to quantity, though firm at these figures. Chinese are quoted 28 @ 30c.

**CUBEB BERRIES** are weak and depressed, though no quotable change in price has taken place.

**CUTTLE BONE**, Trieste, is offering freely at 12c., without, however, attracting special interest. Other grades are quoted down to 11c.

**DAMIANA LEAVES** are in good supply and offering freely at 27c., but the demand is of limited proportions.

**ERGOT** continues quiet but firm. German is held at 40c., and Spanish at 45 @ 50c.

**INSECT FLOWERS AND POWDER** do not meet with much inquiry at the moment, but the market is firm at quotations.

**MANNA** meets with some inquiry, and small sales are making at \$1.25 for large flake, and 40 @ 42c. for small.

**MORPHINE** is without quotable change. Lower prices are looked for, however from manufacturers, and the amount of purchasing being done at present is in consequence limited.

**OPIUM** continues quiet, no change of position having taken place since our last report. There appears to be no disposition manifested by buyers to handle large quantities or resort to speculation, the uncertain future status of the present crop contributing largely to this spiritless condition of the market. Quantity is in instances quoted down to \$2.20 @ \$2.25. For single cases \$2.35 remains the price. For powdered \$3.25 @ \$3.30 is asked.

**QUININE** appears to be gaining strength and there is a good steady distribution in jobbing quantities. Among large sales are included 25,000 ozs., foreign at 17c. cash, but this is an extremely low figure, which is not likely to be quoted again for goods of a similar brand. Upon a regular basis nothing below 18c. is named, while in a small way 18½ @ 18¾c. is wanted.

**SAFFRON**, American, is passing out more freely at the recent decline and numerous small sales are reported at 25c.

**TONKA BEANS** are ruling quiet, the only transaction of importance which has come to the surface lately being 100 lbs. on p. t.

### CHEMICALS.

**ALUM** continues in fair request and steady at \$1.75 for lump and \$1.85 for ground.

**ARSENIC**, white, is maintained with some degree of firmness at 3¼ @ 3½c., despite limited offerings. Only a moderate jobbing business is reported.

**BLEACHING POWDER** is inquired for and the tone of the market is strong at 2¼ @ 2½c. for English in casks, as to quantity, and 2½c. for German.

**BORAX** has continued quiet and easy. For California refined 8 @ 8½c. is asked as to quantity, and City 8½ @ 8¾c.

**BRIMSTONE**, crude seconds, have declined since our last report and parcels in transit nearly due, are offered at \$18.50, and forward shipments can be obtained at \$18.00 @ \$18.25.

**CHLORATE OF POTASH** is quiet but there appears to be no urgency to sell below 15c. for crystals, which figure is regarded as inside. Powdered is held and selling in a small way at 15½c.

**CITRIC ACID** is quiet at unchanged prices. Manufacturers are booking orders at 45 @ 45½c. for bbls. and 45½ @ 46c. for kegs.

**CREAM TARTAR** is offered cheaper than established quotations in some quarters and the market is a trifle irregular in consequence. There is little demand, however, and the market on the whole is quiet.

**NITRATE OF SODA** does not improve in demand and importers do not appear disposed to grant concessions to realize, the quotations standing \$1.65 @ \$1.75 as to quality.

**OXALIC ACID** continues to offer at 6¼ @ 6½c., but the trade requirements are small.

**QUICKSILVER** has weakened considerably since our last report, owing to a reduction in the prices current in the London market. The quotations here are nominally unchanged at 50 @ 51½c.

### DYESTUFFS.

**CUTCH** continues dull and depressed, though the price remains nominally at 4c. @ 5c. for S.M., as to quantity.

**DIVI DIVI** is given very little attention and is nominally unchanged.

**GAMBER** is meeting with less attention, the low prevailing prices not serving to increase the distribution either in a consumptive or in a speculative way. Holders continue to quote 3¼ @ 4¼c. for wharf and store goods, as to quantity. Forward shipments are generally held at 3½c. though bids of a fraction less would undoubtedly be entertained.

**INDIGO** is in moderate demand. The quotations current in New York are below those of any other market, and higher prices may therefore be anticipated.

**NUTGALLS** are quiet and the same may be said of other lines.

**SUMAC** is jobbing fairly at \$72.50 for Sicily and \$43 @ \$47.50 for Virginia.

### ESSENTIAL OILS.

**ANISE** is showing a firmer tendency, though yet obtainable in single packages at \$1.35. The general asking price is \$1.37½ @ \$1.40.

**BERGAMOT** is dull but steady at \$1.75 @ \$2.87.

**BAY** is still held at \$3.50 @ \$4.00.

**CASSIA** offers quite freely at the range of 75 @ 82½c. the inside price for cases, but the demand does not improve.

**CITRONELLA** is less inquired for but the market is steady at 24 @ 22c.

CUBEB is offering in instances down to \$2.25 without, however, stimulating business to any extent.

LEMON is in good jobbing demand and quotations are firm at the limits given.

ORANGE is neglected momentarily but prices are unchanged at \$1.50 @ \$1.75.

PENNYROYAL is in fair request with numerous jobbing sales. Domestic is held and selling at \$1.75, though French is offered at \$1.45 @ \$1.50.

PEPPERMINT remains quiet though without further change in price. HGH held at \$2.70 and bulk at \$2.45 @ \$2.60 as to quality.

ROSE is nominally unchanged, but new selling prices will, it is expected, be announced shortly.

#### GUMS.

ASAETIDA shows a firmer tendency and as high as 25c. was paid on a recent lot of prime Calcutta. We quote the range at 15 @ 22c. for Calcutta and 12½ @ 22c. for London.

CAMPOR continues unsettled. Manufacturers are quoting 48 @ 49c. for barrels and cases, but this is cut from second hands about 2c. per lb.

GUAIAC is dull and prices a trifle easier. The quoted range of the market is 16 @ 22c. as to quality.

SHELLAC appears to be strengthening but little business of consequence has been done. There is almost an entire absence of speculative interest, the current business being confined to the wants of consumers, and these, in view of the recent troubles with workmen in hat factories, are exceedingly limited.

TRAGACANTH is quiet, the only sale of consequence transpiring recently being a ten-case lot of medium grade on p. t.

#### ROOTS.

CALAMUS, bleached, is making sale at 22 @ 24c.

GINSENG is still taken for export at \$1.75 @ \$2.75.

GINGER, Jamaica, is showing an easier tendency owing to lack of interest on the

part of buyers. Bleached is quoted 15 @ 18c. and unbleached at 13 @ 16c.

GOLDEN SEAL is not passing out very freely, but the quotation of 20 @ 21c. is sustained.

IRECAC is maintained steadily, with a fair jobbing business reported. We quote the range at \$1.27 @ \$1.30.

JALAP is dull, but the market is well sustained at 21 @ 24c.

SARSAPARILLA, Mexican, is quiet at unchanged values.

SENEGA, new crop, is offering freely at 38c. for Manitoba and 40c. for Minnesota.

#### SEEDS.

CANARY, Smyrna, continues dull, with an easy market. We quote the range at 2½ @ 2¾c.

CARAWAY, Dutch, is maintained firmly at 6½ @ 7c. though trade is wholly in the way of jobbing parcels, for which the latter price obtains.

MUSTARD, California. Yellow is quoted at 6c. Coast, goods forward delivery, quoted 3¼ @ 3½ c. f. o. b.

## Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted free of charge. Write distinctly, on one side of paper only, and do not use postal cards.*

### POSITIONS VACANT.

**SENIOR**—Registered in New York State; about 25 years of age; mention salary expected in applying to Dr. G. Steinfuhrer, 209 State street, Schenectady, N. Y.

**TO AN HONEST** and temperate drug clerk licensed in Penna., a good position is open. Address J. T. B., care of AMERICAN DRUGGIST, 37 College place, New York.

**WANTED**—Traveling men who visit the drug trade to handle a well established specialty as a side line. Liberal commission. Apply at once. Wilmot Castle & Co., Rochester, N. Y.

**PROFESSOR OF PHARMACY**—Wanted in medical department University of Texas, located at Galveston, Texas; election takes place during the meeting of the Board of Regents in September at Austin, Texas; applicants for above position will please address T. C. Thompson, M.D., Regent, University of Texas, Galveston, Texas.

**SALESMAN WANTED** to handle as a side line a new tablet triturate mold retailing at from \$1.25 to \$1.50 each, one that every druggist should have; quick sales, little work, liberal commissions. For particulars apply to American Triturate Mold Co., 1130 S. 12th street, Philadelphia, Pa.

**WANTED**—A first-class drug clerk as manager; must have New York State license; honest, sober, industrious and used to handling country trade. Apply with references to John A. Robinson & Co., wholesale druggists, Troy, N. Y.

A representative for North America, also one for South America is wanted by a chemical pharmaceutical manufactory in Berlin. Address offers to I. G. 6572, care Rudolf Mosse, Berlin, S. W. (Germany).

### POSITIONS WANTED.

**SITUATION WANTED**—By a pharmacist, licentiate of New York State Board of Pharmacy. Honest and temperate. Address "Powder," care J. G. Wigg, Stamford, Conn.

**YOUNG MAN**, single, 5 years good practical experience, desires position; references A1; place out of town preferred. Address "Aristol," care of AMERICAN DRUGGIST, 37 College place, New York.

**POSITION WANTED**—Drug clerk; registered; 12 years' experience; competent to take charge; references first-class; good salesman. Address "Camphor," care AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD, 37 College place, New York.

**AS TRAVELING SALESMAN**—Druggist having 15 years' retail experience and large acquaintance in the trade wishes position on the road with some reputable house. Address "Quinine," care of AMERICAN DRUGGIST, 37 College place, New York.

**WANTED**, in the State of California, a position in good drug store; will work for small salary; three years' experience, strictly sober, good habits, best of reference. Address Fred S. Hoback, Big Stone Gap, Va.

**POSITION WANTED** in Brooklyn, by N. Y. State licensed clerk, small salary, privilege of college this Fall. Address "Sulphon," care AMERICAN DRUGGIST, 37 College place, N. Y.

**SITUATION WANTED** by drug clerk, graduate of Philadelphia College of Pharmacy; long experience; single, reliable, moderate salary; go any distance. Address Daniel P. Custis, New Berne, N. C.

**SITUATION WANTED** as first clerk of manager in Florida by A1 man, first-class references. Address "Competent," care of AMERICAN DRUGGIST, 37 College place, New York City

**POSITION wanted** by a graduate of the Ontario College of Pharmacy; four and one-half years' experience in city and town; accurate dispenser and good salesman. Address "Recipe," 214 George street, Toronto.

**DRUGGIST**, four years' experience, licensed graduate N. Y. C. P., best references, would like position N. Y. City, or immediate vicinity. Address Wm. Greninger, Chittenango, N. Y.

### BUSINESS OPPORTUNITIES.

**FOR SALE**—Half interest in a good paying store in a rapidly growing town in Blair Co., Pa. Address "Salol," Box 656, Bellwood, Pa.

**DRUG STORE** for sale in nice residence portion of western part of Bridgeport, Conn., \$2,000 cash. For business call at 380 State street, Bridgeport, Conn.

**FOR SALE**—Well established drug business in a lively shipping town on the Erie Railroad; only drug store within a radius of 12 miles; new store with pleasant living rooms over, rent for store, rooms and barn \$12.50 per month, inventory \$800; liberal discount on fixtures. Address Dr. Thad Smith, Cameron, N. Y.

**FOR SALE**—One case, Boericke & Tafel's Homeopathic medicines, in first-class condition, will be sold at a bargain. H. Alex. Stoke, Reynoldsville, Pa.

**FOR SALE**—A leading pharmacy, located in business center of Buffalo, N. Y.; elegant fixtures; complete stock in good condition; over 50,000 prescriptions on file; established over 50 years, during which time there has been only three owners; on account of ill health will be sold at a sacrifice. Address C. O. Rano, Buffalo, N. Y.

**FOR SALE**—First-class drug store at a bargain; net profits \$2,000 to \$2,500 per year; invoices about \$5,000. Address Lock Box 44, Monticello, Indiana.

**DRUG STORE** for sale, stock and fixtures, in the growing town of Great Falls, Mon.; best of reasons given for selling; will be sold at a discount if taken at once. Address J. W. Roberts, Great Falls, Mon.

**FOR SALE**—Drug store in Baltimore; central location, opposite Lexington Market; an immediate buyer can secure bargain; sold to close an estate. Address W. B. Morrison, 330 West Lexington St., Baltimore, Md.

**FOR SALE**—Drugstore in New Jersey; situated 10 miles from New York City; established 30 years. Address "New Jersey," care of AMERICAN DRUGGIST, 37 College place, New York.

**WANTED**—Complete volumes of the *New Remedies*, of 1872, 1873 and 1875 (vols. 1, 2 and 4). Address stating price and condition, E. E. Borgmann, Station A, St. Louis, Mo.

**FOR SALE**—Drug store, at inventory \$1,300 to \$1,500; paying business; about 25 miles from Paul Smith, N. Y.; large territory; good reasons given for selling on application; store near to post-office and hotel; rent low. Address "Sulphonol," care of AMERICAN DRUGGIST, 37 College place, New York.

**WANTED**—To hear of good location for drug store or party with location that would take partner with stock, etc., to increase business. R. L. Doty Jamestown, N. Y.

**DRUG STORE** for sale, stock and fixtures, in a thriving and beautiful city on the Hudson River, near New York, owned by a physician who wishes to devote his entire time to practice. Only \$1,500 required. A rare bargain for an energetic man. Address "Doctor," 14 Colden street, Newburg, N. Y.

**DRUG STORE FOR SALE**—The administratrix of Allen Spengler, deceased, for the purpose of settlement of his estate, offers at private sale the drug store of said deceased, at No. 14 Centre street, South Easton, Pa. This is an old and leading stand in the business center of the town; is a U. S. Postage Stamp agency; but one other drug store in the town. For particulars address Orrin Serfass, attorney, Easton, Pa.

**FOR SALE**—Bright, clean stock of drugs, in a growing town of 300 population in South Dakota, doing good business—will invoice about \$1,200; post office paying \$500 per annum in connection; satisfactory reason for selling. Address C. M. Claremont, S. D.

**FOR SALE**—Hager's "Praxis der Pharmacie," 3 vols., \$10; Pepper's System of Medicine, 5 vols., \$18; The People's Encyclopedia (new), 4 vols., \$18. Address "Books," care of AMERICAN DRUGGIST, 37 College place, New York.

**DRUG STORE FOR SALE** at a bargain; inventory, \$1,800; will sell for \$1,000 cash to close an estate. This store has cleared \$1,100 in one year. An excellent chance for the right man. Address C. D. Hudson, attorney, 135 16th street, West Troy, N. Y.

**Clerks and Employers should call at this office, register their wants and examine our list of POSITIONS WANTED POSITIONS VACANT and BUSINESS OPPORTUNITIES, which can be consulted free of charge.**

**It should be understood that the prices quoted in this column are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a considerable range of prices.**

## Animal and Vegetable Oils.

# American Druggist and Pharmaceutical Record.

A JOURNAL OF PRACTICAL PHARMACY.

VOL. XXIII. No. 7.

NEW YORK, AUG. 17, 1893.

WHOLE No. 560.

## AMERICAN DRUGGIST PUBLISHING COMPANY.

37 COLLEGE PLACE, NEW YORK.

A. R. ELLIOTT, PRESIDENT.

|  |        |
|--|--------|
| Subscription Price—For the United States and Canada, - | \$2.00 |
| If paid in advance direct to this office, -            | 1.50   |
| "    "    for Foreign Countries, - - -                 | 2.50   |
| Single Copies, - - - - -                               | .15    |

The "American Druggist and Pharmaceutical Record" is issued on Thursday of each week. Changes of advertisements and all copy for publication should be received before Tuesday of each week.

We are not responsible for any money paid to agents. All remittances should be made direct to this office. Express Orders, Post-Office Orders and Drafts on New York should be made payable to the "American Druggist Publishing Company" and addressed to them at 37 College Place, New York.

*Liberal Commissions to Club Agents.*

INCREASED interest is manifested each year by the pharmacists of the whole country in the proceedings of the American Pharmaceutical Association, and the membership of that important body which in this country, stands for all that is best in scientific pharmacy, is constantly being augmented by additions to its ranks. The association is now in annual convention at the Memorial Art Palace near the grounds of the World's Fair, and in next week's issue we will present a full account of its deliberations, together with notes on the gathering, especially reported by a member of the editorial staff of this journal.

## FOOD AND DRUG LAWS IN GERMANY.

ATTENTION has been directed by Dr. Hefelman in the *Pharmaceutische Centralhalle* to the deplorable ease with which the laws of Germany regarding the sophistication of food and drugs may be evaded in that country. It seems that the food analyst to make a case against a person charged with sophistication must show that the latter has acted contrary to trade usages, a very elastic term. Lard adulterated with cacao butter, cottonseed oil and tallow was first sold as "prime American hog's fat;" this was illegal, but when the name was changed to "prime eating fat" or "prime table eating-fat" the authorities were helpless, though the titles proved deceptive to the consumer. In the same way sesame or cottonseed oil is labeled "prime table oil," and one brand, "Florida oil," deceiving the buyer but leaving no ground for prosecution under the law, as there exists no recognized standard for articles bearing these names.

## DEPRESSION IN THE GLASS BOTTLE INDUSTRY.

A STRIKING and positive indication of the prevalent distress in business circles is afforded by the great decrease in the consumption of certain articles generally regarded as luxuries. We have reference to perfumes, fancy toilet preparations and nostrums. The falling off in the consumption of patent medicines has been constant during the past six months, and we hear of a number of perfumers and nostrum manufacturers who are actually unable to use the amount of glassware for which they made contracts earlier in the season. One firm alone, whose contract calls for a weekly supply of over one thousand glass bottles, is unable to use one-half of this quantity, and this, despite a far more liberal use of printer's ink in the form of advertisements than had ever before been employed. This lack of demand for perfumery, nostrums, and liquid medicinals has had, as might be expected, a very depressing effect on the glass bottle industry, and the final result with regard to this particular branch of trade cannot be easily foretold. In the glass bottle factories work is usually resumed about September 1, but this year it will be much later before work commences. The large amount of stock carried over from last year's supply will render it unnecessary to start many of the fires before next October at the earliest. This will be felt severely by the glass blowers, but it seems to be a necessity which cannot be avoided owing to a lessened demand for the different kinds of glassware used in bottling the preparations above referred to.

## THE INSTABILITY OF THINGS CHEMICAL.

THE dangers attending the indiscriminate mixing of chemicals by inexperienced persons has been forcibly brought to the attention of a druggist in Wilmington, Del., whose assistant attempted recently to pound a mixture of chlorate of potash and hypophosphite of soda without taking the precautions necessary to avoid accident. That which usually happens in cases of this kind happened here, and the drug clerk is now nursing his eyes and musing painfully upon the instability of things chemical.

This accident will recall a similar one which happened about a year ago, and to which attention was called at the time in these pages. It is highly probable that the cause of explosion could be traced in each case to a dirty mortar.

*Written for the American Druggist and Pharmaceutical Record.*

### SYRUP OF TOLU.

Prepared Without Alcohol or the Aid of Heat.

By W. H. WEARN,

Charlotte, N. C.

Many processes have been recommended for the preparation of this popular syrup, but none have heretofore proved entirely satisfactory to the practical pharmacist; hence the continued inquiries for a more satisfactory formula, which we find in the pharmaceutical journals and association meetings. This experience being my own, I determined to make a practical test as to the possibility of obtaining a satisfactory process and product, and to obtain the exact assay of elements extracted in its process of preparation. Acting upon the fact that benzoic and cinnamic acids are the principal aromatic constituents of tolu balsam, and that these acids form soluble salts with magnesium carbonate, I formulated the following practical method of extracting these aromatic constituents from the balsam. Briefly stated the process is as follows, viz.: Triturate the balsam tolu with one-half its own weight, of magnesium carbonate and sufficient water to form a thick paste; let this stand 12 hours, if gum is solid; if not, simply triturate with liquid gum and add the required amount of water, filter and add the required amount of sugar to form syrup. The finished product will be a beautiful transparent syrup of rich balsamic flavor and taste, and of a light greenish-yellow color.

The following table exhibits the assayed results of the above process:

ASSAY OF SOLUBLE AND INSOLUBLE ELEMENTS OF BALSAM OF TOLU.

| Marc,                 | Water<br>60° F. | Alcohol.   | Chloroform | HCl.  | Na <sub>2</sub> CO <sub>3</sub> .    | Warm Bisulphide<br>Carbon. |
|-----------------------|-----------------|------------|------------|-------|--------------------------------------|----------------------------|
| Balsam tolu           | 44%             | Resin 44%. | Resin 12%. | ..... | .....                                | .....                      |
| Magnes.<br>carbonate. | 34%             | Insoluble. | Insoluble. | 66%.  | Precip. 66%<br>From HCl<br>Solution. | .....                      |
| Marc.                 | .....           | .....      | .....      | ..... | .....                                | Insoluble.                 |

It will be seen by this table that the chemical and mechanical action of the magnesium carbonate upon the constituent elements of the balsam has caused it to yield 44 per cent. of its weight to water, parting with 34 per cent. of its own weight to form soluble salts with its acid elements. The solution upon being treated with hydrochloric acid, yields a precipitate due to benzoic and cinnamic acids, other tests demonstrating this fact. The dry marc, after the process of extraction, yields nothing to warm bisulphide of carbon, showing the extraction of benzoic and cinnamic acids to be complete.

The above assay, as compared with Trommsdorff's, shows that the balsam tolu has yielded to water at 60° F. about 12 per cent. of combined acids, and 32 per cent. of resinous matter. The balsam tolu paste, formed as prescribed, will be found dry enough to reduce to fine powder in the time given. And I would suggest that this powder be prepared and kept in stock, for the extemporaneous preparation of the syrup.

[A modification of the method proposed by Mr. Wearn is in use by a number of pharmacists known to the editor. The modified process consists in diluting a given amount of tincture of tolu with an equal quantity of water and triturating the mixture with

magnesium carbonate; the resulting paste is heated to drive off the alcohol and the residue then extracted with sufficient water to make the necessary amount of syrup required. But both this and the method proposed by Mr. Wearn are open to the objection that they produce syrups containing in solution salts of magnesium that are liable to react with other substances. This, it is evident, should be avoided in syrups used as flavoring agents and from which no specific therapeutic effects are expected.—En.]

### Uniform Syrup of Triple Phosphates.\*

By GEO. J. HARVEY.

The tendency of this preparation to discoloration has been the cause of a great deal of annoyance to the dispenser. This change is presumed to be due to the action of the sugar on the iron salt and seems to take place more rapidly with the official scale salt than with the freshly precipitated ferrous phosphate. While this change does not appear to injure the therapeutic value of the syrup, it is at least unfortunate in prescription dispensing, as some customers readily discover the changed appearance, and their suspicions are not always allayed by subsequent explanations.

Substitution of glucose for the sugar has been proposed as a remedy, but this is open to objections, partly on account of deviation from the official formula, its deficiency in sweetness, and its liability to fermentation in warm climates. Until a satisfactory official formula is devised, it would be well to have a ready means at hand to furnish a uniform article at all times, and for that reason the idea suggested itself to employ an extemporaneous method for the preparation of the syrup in the following manner, the principle of which is to prepare an acid solution of the different salts to be mixed with the syrup only at the time of dispensing.

#### ACID SOLUTION.

400 grains phosphate iron, U. S. P.  
400 grains quinine.  
12 grains strychnine.  
4 fluid ounces phosphoric acid.  
Distilled water, q. s. to make 6 fluid ounces.

Dissolve the phosphate iron in 1¼ fluid ounces of hot distilled water, and when cold mix with the phosphoric acid. In this dissolve the alkaloids and then filter through white filter paper, adding sufficient distilled water through the filter to make measure 6 fluid ounces.

#### SYRUP

40 ounces av. sugar.  
19 fluid ounces distilled water.

Dissolve the sugar by the aid of heat in the water, filter through a pellet of absorbent cotton and if necessary add sufficient distilled water to make measure 42 fluid ounces.

To prepare the official syrup, mix 60 minims of the acid solution with sufficient of the syrup to make one fluid ounce.

The freshly precipitated ferrous phosphate was found to give even better results, therefore a formula for its use, conforming to the U. S. P. standard, is appended.

#### ACID SOLUTION.

275 grains sulphate of iron (pure).  
375 grains phosphate of sodium.  
400 grains quinine.  
12 grains strychnine.  
4 fluid ounces phosphoric acid.  
Distilled water q. s. to make 6 fluid ounces.

Dissolve the sulphate of iron and phosphate of sodium, each separately in 8 fluid ounces of hot

\*Read at the Semi-Annual Meeting of the California Pharmaceutical Society, San Francisco, May, 1893.

distilled water. When cooled to about 125° F., add the solution of the former salt gradually and constantly stirring to that of the latter. Collect and wash the precipitate in the usual manner, with the least possible exposure to light, and drain or express sufficiently to make the precipitate weigh about 1½ ounces av., and dissolve it in the phosphoric acid. If the measure is more than 5½ fluid ounces, it may be gently evaporated over a waterbath until the proper measure has been obtained. In this dissolve the alkaloids, filter and add sufficient distilled water through the filter to make measure 6 fluid ounces. This solution is to be used in the same proportion with the syrup as in the preceding formula for making the official syrup.

Syrup of triple phosphates when extemporized in this manner, is of a very pale color, and the particular point is gained, that the preparation always leaves the store in uniform condition. If a change occurs under the observation of the consumer and is commented upon, the explanation is then easily given.

The latter formula specially commends itself on account of the lighter color and better keeping qualities of the finished product.

#### Trehalum—a New Carbohydrate.

Trehala or trehala manna is a cocoon of a beetle found in a species of oak in Syria and Persia and which is used in those countries in food and medicine. Guibert examined this cocoon (*Compt. Rend.*, 46, 143), as did Apping later (*Dissert. Daput.*, 1885). Berthelot examined the sugar found and gave it the name trehalose.

C. Schiebler and V. Mittlemeier (*Ber. d. D. Chem. Gesell.*, 10, 93) have obtained from the cocoons a new carbohydrate to which they give the name "trehalum."

To obtain trehalum boil trehala with water, either before or after the trehalose has been extracted by strong hot alcohol. Filter the decoction through a hot funnel, allow the filtrate to cool, and after 24 hours filter off the supernatant liquor from the crystals; wash these with water at the ordinary temperature, and recrystallize from hot water. On drying in the air or over a water bath the trehalum appears as a pure white mass, which on slight pressure breaks down into a fine white powder. The yield is about 16 per cent.

Trehalum thus obtained is in tasteless, odorless, microscopic prismatic crystals partly isolated, partly in groups, only slightly soluble in water at the ordinary temperature. It is insoluble in and unaffected by phenylhydrazin, but after heating with a dilute acid reduces alkaline copper solutions. It gives the same inversion product as trehalose (*d-glucose*) and an intermediate dextrin-like substance termed "trahaline."

**American Ginseng.**—Seeds have been received at Kew Gardens, London, of the *Aralia quinquefolia*, A. Gray, and experiments will probably be made as to the feasibility of cultivating the plant. The *Pharmaceutical Journal and Transactions* says "the price realized for the dry roots has ranged from three to three and a half dollars per pound." This statement is probably based upon the retail price lists such as appear in other pharmaceutical journals than the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD. By consulting our package prices it will be seen that the market is dull at \$1.75 to \$2.75, and it is these prices that serve as a guide to the value of the crop to the producer. There is, however, a wide range of prices, depending on the shape, size and texture of the root, and possibly by careful cultivation roots may be produced which will command higher prices.

#### On a Certain Lack of Humor in Physicians.\*

Physicians may undoubtedly be pardoned for it, but they surely have a natural or acquired deficiency of the sense of humor. Their right to pardon comes from the tremendous seriousness of their daily work; they may not even smile at the unconscious jokes of their patients, except after they and their "guitars in their noses" have left the office. "It's awful to have the nerves, doctor," and it's awful likewise *not* to have 'em. Some years ago a medical humorist began the compilation of an encyclopedia of medical wit and humor and solicited contributions from all physicians. The contributions came in huge packages, but they were neither witty nor humorous—they were simply—not to be printed. The would-be author-editor never smiled afterward. It was a sad case of pseudo-cyesis.

Another proof of this thesis has lately come to our notice. Remarking, with much despondency of heart, that physicians as well as "the vulgar herd" like to handle secret proprietary remedies and believe in outrageous claims and certificates of impossible cures, a humorist spent considerable money in advertising in "reputable medical journals" a series of preparations, trademarked and patented, of the most astonishing qualities and powers. Certificates from pompous magnates, with titles of surpassing length as tails to their names, were appended; and the whole affair was set forth with the customary effrontery in the remarkable scientific jargon of the professional advertisement-writer. The actual advertisements are before us as we write.

For the 'anti-vaccinationists and the aristocratic, "Jennerine" possessed a charm; it was of spontaneous production in a blooded cow of long pedigree, but for many generations had been carried through the human royal family of England, acquiring thereby great intensity and nobility. Transmission of the virus and inoculation could also be effected by telegraph "over many miles of wire."

Of "Pasteurine," the universal microbicide, the formula was published, though the name was trademarked, and "other dealers are warned, etc." And this is the formula:

Nitrogen, one volume.  
Carbonic acid gas, pure anhydrous, two volumes.  
Permanganate of potash, two parts by weight.  
Pure oxygen, without admixture, one volume.  
Pure carbon in crystalline form, one part by weight.

"Consumptine" was guaranteed a sure cure for consumption. As regards croupine, the physician required especial teaching and drilling in its application, to prevent the digestion of the membrane of the patient's throat while being swallowed. Its price was \$7.50 per ounce, "very reasonable in consideration of the results obtained." "Dyspepsine" and "cancerine" were guaranteed of absolutely unfailing power. "Ostrichine" enabled one to eat mince pie and railroad sandwiches with impunity. ("We raise our own ostriches.")

"Brainerine" needed only its name to recommend it. "Brains are scarce just now," says the advertisement, "and for this reason our supply for a few years will be limited. Physicians requiring this article for their personal needs or those of their patients will please apply with subscription at once."

And now for the promised proof of professional lack of humor: To the address of the "Nineteenth Century Therapeutical Company," from every part of the United States, came thousands of serious letters from physicians—literally thousands—requesting samples, ordering supplies, and making inquiries as to the applicability of these remedies to ailments described in detail.

\*Editorial in *Medical News*.

# News and Notes.

## Pharmaceutical Association Meetings.

### MONTHLY CALENDAR.

August.

| Date.      | Association.        | Place of Meeting. |
|------------|---------------------|-------------------|
| Aug. 14... | A. P. A. ....       | Chicago.          |
| " 21...    | World's Congress... | Chicago.          |
| " 22...    | Int. Congress...    | Chicago.          |

September.

| Date.      | Association.          | Place of Meeting. |
|------------|-----------------------|-------------------|
| Sept. 5... | Colorado.....         | Pueblo.           |
| " 5...     | New Hampshire....     | Isle of Shoals.   |
| " 17...    | N. W. D. A.....       | Detroit.          |
| " 21...    | Prop. and Dealers'... | Detroit.          |
| " 22...    | Virginia.....         | Blue Ridge Sp'gs. |

## American Pharmaceutical Association.

### THE NEW YORK CONTINGENT.

The party of New York and Brooklyn pharmacists, organized by Caswell A. Mayo and the local Committee on Transportation of the A. P. A. to attend the annual meeting of the American Pharmaceutical Association and visit the Columbian Exposition, took its departure from Jersey City at midnight on Friday, August 11. The party was a large one, in fact one of the largest and most representative parties that ever left this city to attend an A. P. A. meeting. The majority of the members composing the delegation were mutually acquainted, and prior to the departure of the train often came together in little groups for friendly chats and to discuss other things besides the ways of the cutter, and business prospects. That every one of the party was out for pleasure and looking forward to an enjoyable time en route was evident. The veteran Geo. J. Seabury was there with his charming wife and attractive daughters, scarcely less well known than their honored sire at A. P. A. meetings. Then there was a delegation of five from the Kings County Pharmaceutical Society composed of R. C. Werner, John Pfeiffer, F. H. Pamphilon, Prof. H. W. Schimpf and Dr. A. H. Brundage. The Brooklyn Board of Pharmacy was represented by Prof. E. H. Bartley and Dr. W. M. Hutchinson. Others in the party were B. F. Quackenbosh and family, Luther F. Stevens and sister, M. H. Johst, Dr. A. S. Tsheppe, Carl Schur, Carl Kessler, Louis Stoff, D. H. Starr, Victor Kotska and wife, Caswell A. Mayo and wife, Mrs. M. C. Keddie and Miss Kate L. Keddie, F. A. Onderdenk, Adrian Henry, Miss Goodenough, T. M. Davies, G. H. Davies, R. Gemunder, and James H. Jones.

Much praise is due Luther F. Stevens for the successful manner in which he conducted the preliminary arrangements; we believe his efforts to please everyone in the matter of sleeping car accommodations were fully appreciated.

## South Dakota Association.

The members of the South Dakota Pharmaceutical Association convened in eighth annual session, at Yankton, on Wednesday, August 2. The meeting was called to order by R. M. Cotton, president, who delivered his annual address, in which he commented in favorable terms on the present condition of pharmacy in South Dakota. The passage of a new pharmacy act was referred to and deemed a point of

special importance. As likely to contribute to the future prosperity of the association he recommended the establishment of a bureau of education which should have for its object a system of home study and the answering and explaining to members of the association of everyday difficulties which arise in the practice of the profession. He also advocated the founding of a school of pharmacy, and mentioned that he had requested the committee on education to look into the matter and report to the association. He referred to the articles which have appeared in the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD with reference to the adoption of a uniform scale of prices and considered it a good subject for discussion at the meeting.

Following the address of the president came the report of the secretary, I. A. Keith, who reported a total membership of 480.

Several committees were then appointed and reports presented.

The committee on bonds, secretary's salary and registration fee reported, recommending that the bonds of the president and secretary be fixed at \$1,000 each, the salary of the secretary be \$500 and the annual registration fee \$3. The report was adopted without revision.

It was resolved to hold the ninth annual meeting at Huron, on August 8 and 9, 1894, and the board of pharmacy to meet as follows:

At Watertown, October 4, 1893. At Parker, January, 10 1894. At Huron, April 4, 1894. At Sioux Falls, July 11, 1894.

D. K. Bryant, of Huron, was appointed local secretary at Huron to have charge of the arrangements for the next annual meeting.

The election of officers for the ensuing year resulted thus: John McClain, of Tripp, president; James Yeomans, Centerville, first vice-president; C. E. Blount, of Huron, second vice-president; I. A. Keith, of Lake Preston, secretary; F. A. Brecht, of Yankton, treasurer.

Mr. Keith, the secretary elect, has filled that position for six years to the entire satisfaction of the association.



Miner L. H. Leavitt.

The courteous and affable gentleman who bears this name was born at Auburn, Me., just thirty years ago. His parents moved during his early childhood to Portland, Me., where he received his education in the public schools.

Going to Boston in 1880 he became connected with the well-known house of Canning & Patch whence he graduated from the Massachusetts College of Pharmacy as president of the class, winning the "Faculty Prize" for the best thesis.

In January 1886, Mr. Miner purchased the pharmacy at the corner of Charles and Chestnut streets, and two years later bought the well-known Daniel Henchman store on Cambridge street at the corner of Chambers street.

Having taken an active interest in the welfare of the Alumni Association of his *alma mater* he was elected president of the Association in 1887 and re-elected in 1888. In 1889 he joined the Massachusetts Pharmaceutical Association, and was at once elected chairman of the committee on papers and queries. In 1891 Mr. Miner was elected secretary of the association, which office he continues to occupy, his experience has taught the members of the association that he is especially fitted to discharge the onerous duties of the office.

Mr. Leavitt is also a member of the A. P. A. and attended the meetings of 1890, 1891 and 1892. He is an active and efficient member of the board of trustees of the Massachusetts College of Pharmacy and is also a royal arch mason and an odd fellow.

His career is a pointed refutation of the generally accepted idea that in the Eastern States a man must reach middle age before he amounts to anything.

## New York Notes.

R. M. Davis, of Denver, Col., arrived in New York City last week. He expects to make a short stay.

W. H. Livingstone, with W. H. Schieffelin & Co., is taking refuge from the ubiquitous advertising canvasser in the wilds of the Pennsylvania mountains.

Harry Maris of the firm of John M. Maris & Co., manufacturers, importers and dealers in druggists, glassware and sundries, Philadelphia, was noticed in the city last week.

Druggists who keep in stock Bovril and Johnson's Fluid Beef, may not know that

the interests of the firm of food specialists who make these palatable preparations of ox-beef, known as Bovril, Limited, London, are looked after in this country, by an old graduate of the Philadelphia College of Pharmacy. W. M. Shoemaker, who is the gentlemen referred to, is one of the old school druggists who took his degree in the "thirties" and was initiated into the mysteries of the art pharmaceutic by such old time leaders as Bridges, Proctor and Maisch. He still takes a keen interest in the progress of pharmacy, but laments the prevalent tendency of pharmacists to convert what should be laboratories and "apothecaries' halls" into bazaars and places of refreshment.

The soda clerk in Hudnut's drug store was very much astonished the other day at receiving from a dainty and modest-looking maiden, in answer to his stereotyped query: "What flavor?" the calm reply:

"Raspberry, no cream, kisses for two, please."

He recovered on learning that she was visiting here from Boston, where the very latest wrinkle in soda water is to drop into the glass, the last thing, two of the sugar kisses so popular. Two not satisfying the Boston girl, she has got into the habit of "repeating the prescription," though not before with such nearly fatal results. She got the four "kisses" and a look from an appreciative bystander that should have been equal to at least two more.

### "Black Pepsin."

The Department of Agriculture at Washington is investigating a new kind of swindle which has been brought to its attention by a number of its victims. The scheme is intended to fleece farmers, and consists of a "gilt-edge butter compound," which is being advertised through agricultural newspapers and by circulars and postal cards. According to the advertisements a pinch of the compound put in a churn with one pound of soft butter will transfer the latter into two pounds of good butter. The compound is simply pepsin. Mixed with butter it produces an emulsion which enables the butter to take up an equal weight of milk without altering its appearance materially. Any other digestive ferment, such as rennet, will accomplish the same result. The "compound" is sold at the rate of \$2.50 for a two-ounce box, the actual value being about three cents. One disadvantage of its use is that butter manufactured in the way described quickly spoils. It is an adulterated food product, and should be prohibited by law. One firm has declared its intention to spend \$125,000 in advertising the fraudulent substance during the present year.—*National Advertiser*.

### The Manufacture of Chewing Gum in Maine.

The exhibit of Curtis & Son, of Portland, Me., at the Columbian Exposition, is a novel one, comprising among other things a section of a spruce tree showing how the gum is collected. But spruce gum is not the only thing that enters into the manufacture of this chewing compound. Barrels and barrels of sugar must be rolled in every day. The business gives employment to many men and women. Mr. Curtis estimates that in Maine, New Hampshire, Vermont and Canada at least 1,000

men are constantly employed in gathering gum, and thousands of girls are at work in the factories. A good gum factory will keep a paper box factory at work, and many men work at making packing boxes for them. Mexico comes in for its part of the business, the importation of the Mexican chicle gum being an important item every year.

It takes a great deal of money to run a gum factory. Years ago Curtis & Son, when at Bangor, only needed a big kettle and a stove, but now many thousands of dollars' worth of gum is in the drying room of the great factory on Fore street.

"There are Maine men who have made comfortable fortunes by the gathering of gum," said Mr. Curtis recently. "I remember two brothers from whom I bought many thousand dollars' worth of gum. After awhile I was at their place. They had bought a large farm, owned a mill, had a big stock of goods and in fact were what people used to call well-to-do. I asked them how they had made so much money in so short a time, and they replied by gathering gum. I took the best they had and they sold the rest to pay running expenses, putting aside all I paid them and at last investing in land."

### The Paris Riots.

When, rather more than a year ago, the dynamite scare caused so great a sensation in Paris, one of the principal sufferers was a pharmacist of the Rue de Clichy, whose premises were partially blown up, and now pharmacy has again been a sufferer in the recent riots.

During the early part of the riot, when the police and mounted municipal guards were constantly charging the crowds, a number of persons were injured, and they were mostly taken to neighboring pharmacies to have their wounds dressed. On the night of July 4, after some brutalities by the police in the Boulevard St. Germain, three injured persons found their way to M. Cirette's pharmacy, 60 Rue Mazarin. He could not refuse them admittance, and an enormous concourse of people soon assembled round the shop. At the request of his young wife, who was expecting to be confined and had become exceedingly afraid, M. Cirette closed his premises, continuing, nevertheless, to do all he could for his patients. This state of things did not satisfy a group of roughs, who knocked loudly against the shop-front, causing Mme. Cirette to faint.

The poor lady died two days later of the effects of fright. The funeral took place on Sunday, July 9, and a great number of M. Cirette's friends and neighbors showed their sympathy by their presence at the funeral service held at the church of St. Germain des Près, where numerous wreaths and flowers decked the coffin.

Ernest Hart, F.R.C.S., editor of the *British Medical Journal*, is to have an article in the September *Popular Science Monthly* tracing "The Pilgrim Path of Cholera." He will show that the hordes of pilgrims that gather at Mecca, Kalighat, and other sacred places, bathe in and otherwise pollute, yet at the same time drink the sacred waters, and then scatter to their homes, are the means of conveying cholera to the shores of the Mediterranean and across to southern Europe. The

indescribable scenes on the banks of the sacred waters will be shown from photographs.

## CORRESPONDENCE.

### General Uniformity Impracticable.

To the Editor:

You ask me for my views on the subject of uniform prescription charges and while they may not have much weight with you or your readers, I take pleasure in stating them to you as requested.

My pharmaceutical experience has been varied and has included large, as well as small cities; the East, the West, and the Pacific coast, and I do not hesitate in saying that in my opinion it would not only be unwise to attempt the establishment of uniformity in prices for prescriptions, but that such a scheme could not be successfully executed.

There are many reasons why I think as I do, but it will be impossible for me to state them in this letter owing to a lack of time and the precedence of other matters. I shall, however, take pleasure in referring to the matter at greater length in the August issue of the *Pacific Drug Review*.

H. D. DIETRICH,

Editor *Pacific Drug Review*, Portland, Oregon.

### Georgia Prices.

To the Editor:

I have read Mr. Cutts' article with much interest. I think uniformity of price in prescriptions is "A consummation devoutly to be wished" and is a subject that is well worth the attention of any association.

I enclose an extract from the remarks of C. M. Crosby, of Marietta, at the last meeting of the Georgia Pharmaceutical Association, which shows that we have already had it under advisement.

The lowest prices at which we can make a living profit are, to my mind, the following:

|         |                |                           |           |
|---------|----------------|---------------------------|-----------|
| 1 Ounce | Mixtures, 25c. | Pills, Caps. and Powders, |           |
| 2 "     | "              | 35c.                      | 30c.      |
| 3 "     | "              | 40-50c.                   | 75c.      |
| 4 "     | "              | 50-65c.                   | 30c.      |
| 6 "     | "              | 75c.                      |           |
| 8 "     | "              | 90c.                      | 12c.      |
|         |                | Oints. and Conf.          |           |
|         |                | 1/2 Ounce,                | 25c.      |
|         |                | 1 "                       | 35c.      |
|         |                | 2 "                       | 50c.      |
|         |                | 4 "                       | 65c. etc. |

Keep prescription department in as neat a condition as a lady does her parlor, and use best of everything; wrap up in style and taste; allow no one to hurry you; do all of this up to the best art, and charge for it. Know no competitor; your prices are for workmanship and pure drugs. Sell to all alike, rich and poor, and if a charity patient applies give the prescription; it is wise.

You will notice that there is a close agreement between prices recommended by Mr. Crosby and those of Mr. Cutts.

H. R. SLACK.

### Waiting.

I am waiting, waiting, waiting.  
I am waiting patient-lee  
For some pictures of my classmates  
That were promised unto me.  
I gave my own on promises  
Ere college days were done,  
Of the dozen that I gave away  
I got exactly one.

And  
I am waiting, waiting, waiting,  
For those photos due to me  
From the boys who graduated  
In the class of ninety-three.

HARRY HELLER, N. Y. C, P., '97.

# COLUMBIAN EXPOSITION

## Agricultural Building.

(Continued.)

The main floor of the Agricultural Building is divided into five sections, the front four A, B, C, and D, being devoted to the agricultural exhibit of various countries and the several States of the Union, the last one, E, in the rear of that portion known as the "annex," being devoted entirely to farm machinery. The only object of special interest to the pharmacist located here is some distilling apparatus for use on the large scale, exhibited by a French firm.

One of the largest individual exhibits in the building is that of the German Kali Works, of Germany, which is, however, of a chemical character. Here are shown kieserite, carnallite, boracite, sylvinit and kainite, the various minerals occurring in Northern Germany, and from these are derived the other products of the "works," such as Epsom and Glauber's salt, 80 per cent. potassium chloride, 90 and 96 per cent. potassium sulphate, calcined magnesia, caustic soda, potassium carbonate, etc., all of which are on exhibition.

The pavilion is square in form, ornamented with statuary, and on two sides are arched passageways leading to the interior, where the various products of the works are displayed. The "works" consist of a syndicate embracing nine distinct firms engaged in mining the various minerals of Prussian Saxony, particularly such as contain potassium.

The above exhibit is located in the German section, where are also shown hops in large sacks, weighing one hundred pounds, the hop vine in facsimile, and lupulin from Bavaria. There is also an exhibit by F. Bock, of Karlsruhe, of apparatus for making artificial mineral waters; Boonekamp's bitters; Johann Hoff's and Leopold Hoff's malt extracts; Rhens mineral water from Rhens-on-the-Rhine; Fachinger water from Fachinger Nassau, and apollinaris water from Rhenish Prussia. The exhibit of Johann Hoff is in the form of an arch lined within and without with bottles of the extract, the whole being surmounted by a large bottle of the style of the malt extract bottles.

Another object of interest is the exhibit of Stollwerck. This consists of a rectangular base, several feet high, on which rest six pillars about sixteen feet high, these supporting an immense dome surmounted by a crown; within the pillars is a statue of Germania on a pedestal. The whole is made of 30,000 pounds of chocolate and stands 38 feet high.

The Trinidad exhibit contains some articles of pharmaceutical interest like rum in bottles, wormwood bitters, curcuma root, caçao seeds, jequirity or jumbei seeds,

with their scarlet coats tipped with black, dita bark, nutmeg, mace, coca beans, mate—whole leaves—cinnamon bark, vanilla, cocoanut oil, cashew nuts, etc.

The Austrian exhibit contains but a few articles of specific interest. A display of Mattoni-Giesshühler water from Carlsbad surmounted by a gigantic bottle twelve feet high, various artificial essences, like raspberry, cognac, apple, pineapple, etc., by Janauschek Bros., of Prague, toilet soaps, perfumes, and face powders by Ant. Adamek, of Vienna, and a similar exhibit by Gottlieb Taussig, is about all that merits attention. Several firms from Dalmatia exhibit chrysanthemum flowers and that well known product prepared from them, viz., Dalmatian insect powder.

The exhibit of Cuba consists principally of cigars; in fact the cigar industry appears of such paramount importance that but little space was left in the large pavilion for other substances. Among the latter are rum, cognac, absinthe, and cacao seeds; this practically is all there is to the Cuban pavilion.

### BRITISH EXHIBITS.

The British Isles are represented by some substances which as a rule lack instructive character. Among the articles displayed are Flower's lime juice in quart bottles by Riddle & Co., of London; Rose's lime juice by L. Rose & Co., of London; Cromac water from Belfast, Ireland, also various medicinal preparations made with this water; Liebig's extract of meat, and extract of meat, malted wine; Coffyn's Malto-Carnis and Virol from London, Reginaris water from London, and artificial mineral waters by Smith Denton, of Bradford, England.

The most interesting exhibit in the British section is that of Burroughs, Wellcome & Co., manufacturing pharmacists of London, whose carved Indian case of teak wood contains Kepler's extract of malt, plain and variously medicated, malt milk, Kepler's essence of malt, etc.

The most unique exhibit in this section is that of the Bovril Co., manufacturers of Bovril. This is in the form of the exterior of a portion of the ruins of an ancient castle with a turret at one of the upper edges with water constantly flowing down the front. At the side is an arched entrance to the office located within.

Lipton's (London) exhibit of coffees contains caffeine in crystals and oil of coffee, a dark brown liquid.

### OTHER FOREIGN EXHIBITS.

Holland's pavilion contains only Holland geneva in bottles, madder, whole and ground, and indigo from Java, and

the Swedish only rennet extract in the liquid form.

The French section consists largely of immense pyramidal booths of olive oil made up of casks, cans and bottles of various sizes. Among the firms exhibiting this product are J. Mottet et Cie., of Grasse, J. L. Duret et Cie., Bourdeaux, and James Plagniol, of Marseilles. In this section are also displayed a large number of seeds of which some are of pharmaceutical importance, viz.: anise, canary, mustard, benné, linseed, caraway, dill, carrot, millet, poppy, etc.

Russia exhibits mineral waters, liquors, linseed oil, both raw and boiled, dryers, and a small case of chemical apparatus for the examination of grain.

The pavilion of Italy, like that of France, is made up largely of olive oil. Olive oil soap, wines, cognacs, and corks are also presented.

The Mexican exhibit contains a number of interesting objects like mezquite and other wines, brandies, and several immense cakes of toilet soaps. The most striking and attractive feature is the several cases containing bunches of vanilla beans. These are of first-class quality, and it is probable that this exhibit alone is worth several hundreds of dollars; it is in charge of the Charles E. Hires Co., of Philadelphia.

The exhibits of East Asia, Africa, and South America are the most interesting and instructive in character, these countries as a rule being represented much better than the European nations.

Ceylon, for instance, is represented by rolls of the true cinnamon, cocoanut oil, citronella oil, lemon-grass oil, areca nuts, the barks of Cichona ledgeriana, succirubra, and officinalis, in short and long quills, chips, etc., plumbago, cardamom, long and short, annatto seed, nutmeg, mace, cloves, white and black pepper, coca leaves, cacao seeds, croton oil seeds, etc.

East India is represented by cardamom, pepper, betel nut, curcuma, root cummin seeds, etc.

Japan is represented by slab glue in various colors, varying from light brown to dark brown, dozens upon dozens of pound bottles of crystal menthol, also menthol in sticks, peppermint oil, vegetable wax in large cakes, and rice wine.

The Cape Colony exhibit consists of some interesting things like buchu leaves of both the long and short varieties, wines, brandies, argols in lumps, unsorted Cape gum from the acacia horrida, a substance very similar to acacia, and a large cake of aloes several feet long and about one and a half feet broad.

(To be continued)

## With the Advertisers.

### Armour's Pepsine.

Armour & Co., of the Armour Laboratory, Chicago, have recently issued a letter announcing that they have received reliable information that the new United States Pharmacopœia will call for a pepsin of 1:3000 strength, and a saccharated pepsin 1:300, and in view of the test that has been decided upon by the committee on revision their pepsin that is at present on the market will meet the requirements of this test. In this letter the point is made that physicians in prescribing "Armour's Pepsin" can feel assured that they are getting an article that is U. S. P. strength, and one that will admit of being administered to the most sensitive stomach, as it is soluble, odorless, nonhygroscopic and aseptic.

In their "Nutrient Wine of Beef Peptone" and "Essence of Pepsin" they have two most admirable preparations, both of which can be commended with the utmost confidence.

### Substitute for Oil of Neroli.

Fritsche Bros., New York, announce that they have after many experiments succeeded by chemical means in obtaining the natural odor of orange blossoms in such a degree of perfection that, as experiments and long observation have shown, it is capable of completely replacing the oil of orange flowers or neroli in perfumery.

In view of the results obtained the firm has deemed it advisable to substitute the less valuable product hitherto known under the name of *Nerolin*, by this new substance and bring the same into the market as *Nerolin* 1. *Crystallized*.

### Hunyadi Water.

Pharmacists will be interested in the announcement that the proprietor of the widely known bitter mineral water Hunyadi Janos, has purchased the Hunyadi Arpad and other Hunyadi springs. The last mentioned will not be offered for sale in this market after the present stock on hand is exhausted. Of the better known Hunyadi water springs of Europe, there will hereafter only be the Janos and Lajos exported to this country.

### Vinolia Price List.

During Summer season now upon us druggists at Summer resorts can do no better than obtain a price list of "Vinolia" goods, together with a supply of advertising matter offered (and the show card is one of the finest we have ever seen) and purchase a small stock. Druggists are certainly not in business for fun, and if attention is given to seeing that all articles sold net a fair percentage of profit, they will stand a fair chance of finding their business more remunerative in the future than it has been of late years.

### Perfumes of Duval Freres.

The accompanying cut illustrates the style of container in use by Duval Frères for their widely known odors. The perfumes representing all of the popular odors of uniform and superior quality are supplied to the trade in 16 oz., 8 oz., and 4 oz. glass-stoppered bottles through Lehn & Fink, New York, who are sole American agents for Duval Frères. The special trademarked odors of this house are Elka Bouquet and Columbus Bouquet, two scents for which special daintiness of odor is claimed. The regular odors comprise:

Acacia, Ess. Bouquet, Fleurs d'Orange, Fraugipanni, Heliotrope, Jasmin, Jockey Club, Lily of the Valley, Magnolia, Mai-Glückchen, Millefleurs, Musk, New Mown Hay, Ocean Spray, Opoponax, Patchouly, Reseda, Rose des Alpes, Stephanotis, Tuberose, Violet, West End, White Heliotrope, White Lilac, White Rose, Wild Olive, Wood Violet, Ylang Ylang.



Information regarding price, etc., can be obtained on application to Lehn & Fink, wholesale druggists, 128 William street, New York.

### An Interesting Pamphlet.

The investigations of De Jongh, Gautier and Mourgues and others as to the condition of cod liver oil have been collated by Fred'k Stearns & Co., Detroit, Mich., and issued in pamphlet form under the title "A Treatise on Wine of Cod Liver Oil with Peptonate of Iron." This pamphlet contains a great deal of valuable information concerning the active principles of cod liver oil, embracing the results of the most recent researches and reports with microscopical drawings of the active constituents of cod liver oil. A chapter of the pamphlet is also devoted to a study of peptonate of iron, while the concluding portion is devoted to clinical reports of cases treated with Stearns' wine of cod liver oil with peptonate of iron. The pamphlet is worthy of preservation for reference. It will be forwarded free by Messrs. Stearns & Co. to any of our readers who mention the DRUGGIST when writing.

### A Palatable Mineral Water.

It is seldom that a mineral water credited with curative properties possesses at the same time palatability. This is, however, the case with Silurian Mineral Spring Water, the product of a natural spring which acts as a mild hepatic stimulant and diuretic though presenting no apparent points of difference from an ordinary sparkling spring water. The springs are in control of the Silurian Mineral Water Co., who put up the still water for the trade in barrels, half barrels, 10 gallon tanks and cases of 12 half gallon bottles. It is also put up in quart and pint bottles as Effervescent Silurian, Silurian Ginger Ale, and Silurian Wild Cherry Phosphate. For use at the soda fountain, the Silurian comes in the form of Silurian Wild Cherry Syrup, a preparation of excellent appearance and properties.

### Parker, Stearns and Sutton incorporated

The firm of Parker, Stearns & Sutton, manufacturers of rubber goods and druggists' sundries, New York City, have formed themselves into a corporation with a capital of \$450,000. The directors of the company are Russel Parker, James H. Stearns and B. F. Franklin Sutton, of Brooklyn, each of whom subscribe for 15,000 shares of the capital of the corporation.

### A New Tooth Cream.

The Florence Manufacturing Co., of Florence, Mass., widely known as makers of the Prophylactic Tooth Brush and Solid Hair Brush, have placed a new tooth cream on the market which they have styled "Operle Cream." It is put up in collapsible tubes and presents a neat and attractive appearance. The tube bears on its face the words "Operle Cream for the Teeth."

### The Humphreys' Medicine Co.

The Humphreys' Medicine Company, New York, announce a renewal of their offer to give a French plate beveled glass mirror, together with books, picture cards, and counter wrappers, to any druggist ordering one dozen Humphreys' Witch Hazel Oil (trial size).

The order can be sent either direct or through any jobbing house in the United States.

### Address of the Crown Perfumery Co.

In calling attention to the new price list issued recently by the Crown Perfumery Company, it should have been mentioned that the firm can be addressed at their New York office, 160 Fifth avenue, New York, which is in charge of Percy C. Magnan.

## NOTES ON PRICES.

## CHEMICALS.

In the August circular of the Roessler & Hasslacher Chemical Co., 73 Pine street, New York, an advance is noted in the price of ammonium carbonate, and the addition of chloride of zinc to the list of chemicals manufactured. The quotations on chloride of zinc are placed on the basis of 9 cents per lb. in 600 lb. lots.

Referring to their exhibit at the World's Fair they quote the following from the *Chemist and Druggist*:

The Roessler & Hasslacher Chemical Company, of New York, have the largest display of general chemicals in the section. It stands at the north corner of Columbia avenue, occupying a space of about 500 square feet. The case is a handsome structure, standing upon an artistic base covered with beautiful tiles colored and glazed with the company's chemicals. Each corner is surmounted by an eagle. The contents of the case illustrates the company's own manufacture, which include acetone, chloroform, cyanide and prussiate of potash, the noble metals and their salts, fluxes, enamels, etc. The firm are also agents for the Auerbach-Quinine Factory, the Aluminium Company (Limited) of Oldbury, the Griesheim Chemical Works of Frankfurt, and other German concerns, and show specimens of their products, including the cinchona alkaloids, chloral hydrate, acetanilid, aniline products, chrome compounds, etc. The exhibit is altogether as varied and instructive in character as any in the American section.

## Special Quotations.

Fuller & Fuller Co., importers and wholesale druggists, Randolph and Franklin streets, Chicago, Ill., are soliciting orders for the following goods at the prices quoted:

Ammon. Mur. Gran. White, 99 per cent. (25 lbs. 11¼c.) 10 lbs., 12c. lb.; Rochelle Salts, (25 lbs. 24¼c.) 10 lbs., 25c. lb.; German Chamomile, crop '93. (25 lbs. 31c.) 10 lbs. 32c. lb.; Bay Rum, Imported, choice, 3 gal. jug. 2 90 gal.; Oil Origanum, French, 5½ lb., orig. can inc., 32c. lb.; Oil Sassafras, 5 lb. bottle inc., 45c. lb.; Oil Cloves, 1 lb. bottle inc., 85c. lb.; Oil Pennyroyal, 1 lb. bottle inc., 2.25 lb.; Chloral Hydrate, Cryst. 1 lb. bottle inc., 1.30 lb.; Salicylic Acid, 5 lb. lots, 1.24 lb.; French Gelatin, Silver, 5 lb. lots, 38c. lb.; Blackberry Brandy, 10 gal. orig. keg inc., 1.46 gal.; California Brandy, 10 gal. keg inc., 2.45 gal.; Antonini Olive Oil, 1 gal. orig. can inc., 2.75 gal.; Plagniol Olive Oil, 1 gal. orig. can inc., 2.25 gal.; Montserrat Lime Juice, qts., 1 doz. case, 3.25 case; Sulphuric Ether, U. S. P., 5 lb. can inc., 63c. lb.; Cacao Butter (12 lb. box 38c. lb.), 40c. lb.; English Precipitated Chalk, 7 lb. orig. bbls., 10c. lb.; Japanese Camphor, 1 oz. cakes, orig. pkgs. 10 lbs., 53c. lb.; Boracic Acid Powder, 18c. lb.; Sugar Milk Powder, 18c. lb. Cardamom, Select Malabar, 80c. lb.; Iodoform, Crystal or Powdered, 4.75 lb.; Sub-Nitrate Bismuth, 2.10 lb.

## Review of the Wholesale Market.

New York, August 16, 1893.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

There is little new to report in the condition of trade during the week under review. The various importing and jobbing houses still complain of difficulty in making collections and report a decided lack of interest on the part of buyers with regard to quantity lots. It is expected, however, that when confidence is restored and money becomes easier, a better demand will ensue, and an improvement along the entire line will surely follow. It is thought in some quarters that certain lines will soon advance in value owing to recent purchases for European account. In the list among

others of minor importance are included balsams Peru and tolu, gum kino, Curacao and Barbadoes aloes, Brazil wax, ergot, coca and damiana leaves and orange peel. The price changes of the week indicate a less firm market and declines are noted in gum arabic, cacao butter, oils of copaiba, pennyroyal, and peppermint, and cubeb berries.

## DRUGS.

ALCOHOL is in fair steady inquiry at previous quotations.

ARNICA FLOWERS are improving in demand and sales are reported of 3,000 lbs. at 11c.

BALSAMS.—Canada Fir is unsettled and dull with an easy market. The nominal spot price as quoted is \$2.45, though less would probably be accepted upon a firm bid. Copaiba, Central American, continues in fair request though without quotable change in price. Tolu and Peru have shown no important change during the week.

BARKS.—Cascara Sagrada continues held at the recent advance and a fair jobbing business is reported. Kava Kava is meeting with some attention from consumers, but no transactions of importance have come to the surface. Soap is still unsettled owing to active competition among holders and 4c. is the figure quoted generally. We are reported one sale of 50 barrels of ground bark at this figure.

BELLADONNA LEAVES have been inquired for and we hear of a sale of 1,200 pounds at 12c.

BUCHU LEAVES, short, are firmer and an advance is anticipated.

CACAO BUTTER has sold at lower figures during the past few days. We notice one sale of 10,000 lbs. foreign at 32¼ and another of 2,000 lbs. at 32½c., both for cash. Neither of these figures, however, represent the market, as the stock is closely concentrated and held upon regular terms at 34 @ 35c.

CANTHARIDES have shown no special action of late, and the market is not regarded as strong.

CASSIA BUDS continue very dull, though holders maintain the market at 18 @ 18½c.

CASTOR OIL is fully maintained at manufacturer's prices and trade in a jobbing way is reported as fair. Best grades are quoted 14½ @ 15c. for bbls., and cases 15 @ 15½c. No. 3 is held at 11½ @ 12c. for bbls., and 12 @ 12½c. for cases.

CHAMOMILE FLOWERS, German, new crop, are in good supply and held at the range of 18 @ 25c. as to quality.

COCA LEAVES, Truxillo, are offered more freely and can be obtained down to the point of 15c. Huanaco are steady at 28 @ 30c.

COLOCYNTH APPLES continue very quiet, though the quotations of the market show no special variation, Trieste being held at 27 @ 38c. as to quality, and Spanish at 20 @ 24c.

CUBEB BERRIES reflect an easier market with 27 @ 30c. now quoted as acceptable for X X and 22½ @ 25c. for ordinary.

CUTTLE BONE is in fair supply and offering freely at 12c., but only moderate jobbing transactions are noted.

DAMIANA LEAVES are in limited supply and the available stock is closely concentrated, sales of quantities have been made at 26c., but 27c. is now generally required.

ERGOT is dull though without quotable change in price.

GUARANA is yet held at \$1.05 @ \$1.10, though a lower figure would probably be accepted upon a firm bid.

LYCOPODIUM is very scarce, and the present available supply is closely concentrated and maintained firmly at the range of 53 @ 55c. as to marks.

MANNA continues scarce and firm upon the basis of \$1.25 for large flake, small 40 @ 42c. and sorts 35 @ 36c.

MENTHOL is hardening and now held at \$3.60 as an inside price.

MORPHINE continues in active request without quotable change from manufacturers' prices.

OPIUM offers quite freely with holders prepared to entertain bids of \$2.20 in quantity lots. Primary markets are hardening, but the situation here is apparently unaffected. Single cases are seeking buyers at \$2.30 @ \$2.35, but \$2.25 would probably be accepted on a cash basis, but this does not appear to stimulate interest, important demand being lacking. Powdered is selling in small lots at \$3.25 @ \$3.30.

QUININE is in good consumptive demand, and the market is well sustained upon the basis of 18 @ 18½c. as to brand. During the week sales have been noticed of 10,000 and 5,000 lbs. B. & S. at 17c. cash.

SAFFRON, American, is in good jobbing demand and firm at 25c.

SENNA LEAVES are held at about previous prices though the trade requirements are small.

SOAP, Conti's white, is in good jobbing demand at 9½ @ 10c.

TONKA BEANS are in slow demand, but values continue firm owing to adverse reports regarding the outlook for new crop Angostura.

VANILLA BEANS are retained in firm position, though the demand at present is limited to small and unimportant quantities.

## DYESTUFFS.

CUTCH has shown no material change during the week. S.M. has sold down to 4¼ spot, though the nominal quotation is 4½ @ 5c. current sales being transacted at this range.

DIVI DIVI has not changed from \$45, though few sales are reported.

GAMBIER is in liberal supply and is offered quite freely at the low current values. For the "Berna" at the wharf sales are making at 3¼ @ 3½c. Forward shipments continue held at the last named figure.

NULGALLS, blue Aleppo, are maintained at 13¼ @ 14c., though inquiries are limited to small and unimportant quantities.

SUMAC continues quiet at previous values, say \$72.50 @ \$77.50 for Sicily, and \$43 @ \$47.50 for Virginia, but no sales of any consequence have been reported.

TURMERIC is unchanged at 6½ @ 7c. for Coringa and 5 @ 5½c. for Bengal.

## CHEMICALS.

ARSENIC, red, is scarce and firm at 5½ @ 6½c. as to quality.

BLEACHING POWDER, chlorinated lime, is less liberally inquired for; the supply on hand is heavy enough to keep consumers well supplied. German in soft casks is offering in the trade down to \$2.05 for carload lots and \$2.12½ in the ordinary way. English is maintained steadily at 2¼ @ 2½c. as to quality.

BLUE VITRIOL does not change from 3¼ @ 3½c., though the former figure can be shaded in instances to 3¾c.

BRIMSTONE, crude, continues dull though the quotations are unchanged, \$18 for forward shipments.

CARBOLIC ACID is rather slow of sale, but the market is unchanged and appears to be well sustained at, say 14½c. for drums and 21½c. for pound bottles.

**CITRIC ACID** is quoted by domestic makers at 46c. for 21 kegs, less two per cent. for cash, and this is met by outside holders by offering stock at 45c. net.

**CREAM TARTAR** is very quiet, with manufacturers' prices yet regarded as the market, though the discounts vary from 1 @ 2 per cent.

**NITRATE OF SODA** is a trifle weaker with recent sales at \$1.70 @ \$1.75 as to quantity.

**OXALIC ACID** is firmer though not quotably higher, 6½ @ 6¾c. being generally asked.

**QUICKSILVER** has yielded to 50c., without however influencing the demand to any appreciable extent.

#### ESSENTIAL OILS.

**ANISE** moves out rather slowly, though there is no urgency to realize, importers quoting \$1 37½ as an inside price.

**BERGAMOT** is maintained steadily at \$2 @ \$2.87½.

**CASSIA** is steady at the range of 75 @ 82½c., with the jobbing movement fair.

**CLOVE** is without action of importance. The quotation of the market stands 55 @ 60c. as to quality and holder.

**CUBEB** offers quite freely at the recent concession to \$2 25, but the demand has not been appreciably stimulated.

**PENNYROYAL** is not taken with any freedom, though offerings are made from holders upon the basis of \$1.40 for imported and \$1.65 for domestic.

**PEPPERMINT** reflects an easier market. Bulk in Wayne County is offered at the equivalent of \$2.50 here, but no important inquiry is to be noted as a result of this low

value. **HGH** upon spot is quoted at \$2.62½ @ \$2.65 and in one instance \$2.60 is named, though at the latter price only single packages are tendered. The stock is said to be progressing favorably and distillation has commenced.

**WINTERGREEN** is quiet at nominally unchanged quotations.

#### GUMS.

**ACACIA** has yielded to continued neglect and easier prices abroad, and values have declined as follows; First picked, 54 @ 58c.; second 40c.; third, 24c.; fourth, 18 @ 19c.; fifth, 14 @ 15c., and sorts 12½ @ 13c.

**ALOES**, Curacao, continue in fair jobbing request and the tone of the market is stronger. From second hands the quotation stands 2½ @ 2¾c.

**CAMPOR**, refined, is irregular and unsettled. Manufacturers' quotations still remain 48 @ 49c. for bbls and cases, but outside supplies are still obtainable at 46 @ 47c. and possibly less.

**KINO** continues held and selling at 75 @ \$1.

**SHELLAC** continues to reflect a rising market, though the demand at the moment is exceedingly limited. The selling limits here have been advanced in view of stronger advices from primary sources, and holders now quote D C, 35c. VSO and octagon B 30c., Diamond I 29c., SS 28½ @ 29c., T.N 26c., No. 1 button 32c., and garnet 24c.

**TRAGACANTH** has declined in sympathy with the London market and is now quoted 30 @ 58c.

#### ROOTS.

**DANDELION**, German, is passing out to the trade in jobbing quantities at 7½ @ 8c.

**GOLDEN SEAL** is selling in small lots ex-store at 20 @ 21½c. The new crop is yet held at 18½c. f. o. b.

**IPECAC** is unchanged from \$1.27 @ \$1.30; the demand, however, is unimportant.

**JALAP** does not change from 21c. from the hands of importers, and jobbers continue to hold at 22 @ 24c. as to quality. Important inquiry is wanting.

**PODOPHYLLUM** has been inquired for and we are reported sales of prime grades at 3½c.

**SARSAPARILLA**, Mexican, continues quiet, though the price is well maintained at 8 @ 8½c. as to quality.

**SENEGA** has been in active request during the week, and we note several large sales on private terms. We quote Manitoba 36c. and Minnesota 38 @ 40c.

**SNAKE**, Texas, remains quiet but firm at 20 @ 22c.

#### SEEDS.

**CANARY**, Smyrna, is dull and unchanged at previous quotations; of Spanish we are reported a sale of 50 bags at 3¾c.

**CARAWAY**, Dutch, is easier, with sellers at 6½ @ 6¾c.

**CELERY** is held at 11½ @ 11¾c.

**FENNEL**, German, is held in instances up to 12c. for small parcels.

**HEMP**, Russian, upon spot is held at 2½ @ 2¾c. as to quantity.

**POPPY** has declined to 7¾c.

**RAPE**, German, is hardening owing to scarcity of stock. We quote the range at 3½ @ 3¾c.

## Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted free of charge. Write distinctly, on one side of paper only, and do not use postal cards.*

#### POSITIONS VACANT.

**ASSISTANT WANTED**—A qualified assistant or manager of Pennsylvania board wanted for store in York, Pa. Apply with particulars of salary expected, age and references to J. A. Stone, M.D., 509 East Market street, York, Pa.

**WANTED**—Traveling men who visit the drug trade to handle a well established specialty as a side line. Liberal commission. Apply at once, Wilcox Castle & Co., Rochester, N. Y.

**PROFESSOR OF PHARMACY**—Wanted in medical department University of Texas, located at Galveston, Texas; election takes place during the meeting of the Board of Regents in September at Austin, Texas; applicants for above position will please address T. C. Thompson, M.D., Regent, University of Texas, Galveston, Texas.

**SALESMAN WANTED** to handle as a side line a new tablet triturate mold retailing at from \$1.25 to \$1.50 each, one that every druggist should have; quick sales, little work, liberal commissions. For particulars apply to American Triturate Mold Co., 2130 E. 15th street, Philadelphia, Pa.

**WANTED**—A first-class drug clerk as manager; must have New York State license; honest, sober, industrious and used to handling country trade. Apply with references to John A. Robinson & Co., wholesale druggists, Troy, N. Y.

A representative for North America, also one for South America is wanted by a chemical pharmaceutical manufacturer in Berlin. Address offers to I. G., 4572, care Rudolf Mosse, Berlin, S. W. (Germany).

#### POSITIONS WANTED.

**POSITION WANTED** by September 1 in the country; Vermont or mountainous district of New York preferred; am 31 years old, temperate and willing to work; good prescriptionist; references. Edward C. Bell, Far Rockaway, N. Y.

**WANTED**—Position by drug clerk, 15 years' city experience, best of references, licensed. Address "Pharmacist," 355 West Gray street, Elmira, N. Y.

**SITUATION WANTED** by a clerk speaking German, Hungarian, Roumanian, French and Polish; six years' experience principally as prescription clerk; best of references; salary moderate to begin on. Address William Paikert, care M. Marculescu, Delancy and Orchard streets, New York City.

I DESIRE a position with a good drug firm in Michigan; 15 years' practical experience; registered; will take an interest; good reference. Address "Lycopodium" (Box 112), Dalton, N. Y.

**SITUATION WANTED** as first clerk or manager in Florida by A. man, first-class references. Address "Competent," care of AMERICAN DRUGGIST, 37 College place, New York City.

**POSITION** wanted by a graduate of the Ontario College of Pharmacy; four and one-half years' experience in city and town; accurate dispenser and good salesman. Address "Recipe," 214 George street, Toronto.

**DRUGGIST**, four years' experience, licensed graduate N. Y. C. P., best references, would like position N. Y. City, or immediate vicinity. Address Wm. Greminger, Chittenango, N. Y.

#### BUSINESS OPPORTUNITIES.

**FOR SALE**—We have for sale a large number of drug stores in various parts of the country. Before buying consult us. No charge to purchasers. The Pharmaceutical Exchange Bureau, 1501 Arch St., Philadelphia, Pa.

**FOR SALE**—Half interest in a good paying store in a rapidly growing town in Blair Co., Pa. Address "Salol," Box 656, Bellwood, Pa.

**DRUG STORE** for sale in nice residence portion of western part of Bridgeport, Conn., \$2,000 cash. For business call at 380 State street, Bridgeport, Conn.

**FOR SALE**—A leading pharmacy, located in business center of Buffalo, N. Y.; elegant fixtures; complete stock in good condition; over 200,000 prescriptions on file; established over 50 years, during which time there has been only three owners; on account of ill health will be sold at a sacrifice. Address C. O. Rano, Buffalo, N. Y.

**FOR SALE**—First-class drug store at a bargain; net profits \$2,000 to \$2,500 per year; invoices about \$5,000. Address Lock Box 44, Monticello, Indiana.

**PHARMACY AND RESIDENCE** in Baltimore for sale together or separate; average profits \$1,200 to \$1,500 a year; corner prominent avenue and thoroughfare; oak fixtures; handsome soda apparatus, full stocked; best of reasons given. Address "Business," care of AMERICAN DRUGGIST, 37 College place, New York.

**WANTED**—To hear of a good location for drug store in Pennsylvania or party with location who desires partner with stock, etc., to increase business. Address "Caffeine," Box 389, Homer City, Pa.

**PHARMACIST**, registered in Penna., with \$800 to \$1,000 cash, may hear of excellent opportunity to start in business with physician; single man preferred. Address "H., '93," care of AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD, 37 College place, New York City.

**DRUG STORE** for sale, stock and fixtures, in the growing town of Great Falls, Mont.; best of reasons given for selling; will be sold at a discount, if taken at once. Address J. W. Roberts, Great Falls, Mont.

**DRUG STORE** for sale, stock and fixtures, in a thriving and beautiful city on the Hudson River, near New York, owned by a physician who wishes to devote his entire time to practice. Only \$1,500 required. A rare bargain for an energetic man. Address "Doctor," 24 Colden street, Newburg, N. Y.

**DRUG STORE FOR SALE**—The administratrix of Allen Spengler, deceased, for the purpose of settlement of his estate, offers at private sale the drug store of said deceased, at No. 14 Centre street, South Easton, Pa. This is an old and leading stand in the business center of the town; is a U. S. Postage Stamp agency; but one other drug store in the town. For particulars address Orrin Serfass, attorney, Easton, Pa.

**FOR SALE**—Bright, clean stock of drugs, in a growing town of 300 population in South Dakota, doing good business—will invoice about \$1,200; post office paying \$500 per annum in connection; satisfactory reason for selling. Address C. M. Claremont, S. D.

**FOR SALE**—Hager's "Praxis der Pharmacie," 3 vols., \$10; Pepper's System of Medicine, 5 vols., \$16; The People's Encyclopedia (new), 4 vols., \$18. Address "Books," care of AMERICAN DRUGGIST, 37 College place, New York.

**DRUG STORE FOR SALE** at a bargain; inventory, \$1,800; will sell for \$1,000 cash to close an estate. This store has cleared \$1,100 in one year. An excellent chance for the right man. Address C. D. Hudson, attorney, 135 16th street, West Troy, N. Y.

**Clerks and Employers should call at this office, register their wants and examine our list of POSITIONS WANTED POSITIONS VACANT and BUSINESS OPPORTUNITIES, which can be consulted free of charge.**

# ORIGINAL PACKAGE PRICES.

It should be understood that the prices quoted in this column are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a considerable range of prices.

| Drugs, Chemicals, &c.      |       |   |       |                          |       |   |       |                            |       |   |       |
|----------------------------|-------|---|-------|--------------------------|-------|---|-------|----------------------------|-------|---|-------|
| Acetanilid, bulk, per lb.  | .39   | @ | .41   | Codeine, bulk, oz.       | 4.75  | @ | ...   | Nux Vomica, lb.            | .03   | @ | .04   |
| " lbs., per lb.            | ...   | @ | .58   | Codeine, eight.          | 4.65  | @ | ...   | Nutgalls, China, per lb.   | .13   | @ | .13   |
| " ozs., per oz.            | ...   | @ | .06   | Cod Liver Oil, Nor-      | ...   | @ | 28.50 | Aleppo, per lb.            | .13   | @ | .14   |
| Acetate of lime:           |       |   |       | wegian, bbls.            | 18.50 | @ | ...   | Oils, Essential:           |       |   |       |
| Brown, per 100 lb.         | .90   | @ | .95   | Colocynth:               |       |   |       | Anise.                     | 1.35  | @ | 1.40  |
| Gray, per lb.              | .01   | @ | .01   | Trieste, lb.             | .30   | @ | .38   | Almonds, Bitter.           | 7.50  | @ | ...   |
| Acids:                     |       |   |       | Spanish.                 | .20   | @ | .22   | " Sweet.                   | .20   | @ | .43   |
| Acetic Com'l.              | .01   | @ | .02   | Copperas, per 100 lb.    | .75   | @ | .90   | Bay, per lb.               | 3.50  | @ | 4.00  |
| Aquaforis, 36 deg.         | .03   | @ | .03   | Cr. Tartar, Crystals, lb | .19   | @ | .20   | Bergamot.                  | 2.00  | @ | 2.87  |
| " 32 " "                   | .03   | @ | .04   | Powdered, lb.            | .20   | @ | .20   | Cajeput, Native.           | .45   | @ | .55   |
| Benzoic, German.           | .47   | @ | .54   | Cube Berries, xx, lb.    | .27   | @ | .30   | Camphor.                   | .07   | @ | .08   |
| " English.                 | .09   | @ | .09   | Ordinary, lb.            | .22   | @ | .25   | Cassia.                    | .75   | @ | .82   |
| Boracic, Whole.            | .13   | @ | .14   | Cutch, bales, SM, lb.    | .04   | @ | .05   | Citronella, Native.        | .84   | @ | .28   |
| " Powdered.                | .13   | @ | .14   | Cutch, boxes lb.         | ...   | @ | .09   | Clove.                     | .55   | @ | .60   |
| Citric, American.          | .45   | @ | .46   | Cuttle bone, Trieste, lb | ...   | @ | .12   | Copaiba.                   | .70   | @ | .75   |
| " English.                 | ...   | @ | ...   | Jewellers' lb.           | .35   | @ | ...   | Croton.                    | .75   | @ | .80   |
| Carbolic Crystals.         |       |   |       | Dextrine.                | .04   | @ | .05   | Cubeb.                     | 2.50  | @ | 2.60  |
| bulk.                      | .14   | @ | .17   | Divi Divi, per ton.      | 45.00 | @ | 55.00 | Eriogon, per lb.           | 1.45  | @ | 1.60  |
| lb. bottle.                | .21   | @ | .23   | Dragon's B'd, lump, lb   | ...   | @ | ...   | Geranium Chirs.            | 4.50  | @ | 7.50  |
| Muriatic, 28 deg.          | .09   | @ | .13   | In reeds, lb.            | .45   | @ | .50   | Lavender.                  | 1.20  | @ | 1.85  |
| Nitric, 36 degrees.        | .03   | @ | .04   | Epsom Salts, per 100 lb. | 1.00  | @ | 1.10  | " Garden.                  | .40   | @ | .90   |
| " 30 " "                   | .04   | @ | .04   | Ergot:                   |       |   |       | Lemon, as to brand.        | 1.35  | @ | 2.30  |
| Oxalic, English.           | .06   | @ | .06   | G'm'n and Russ'n, lb     | .40   | @ | .42   | Limnogram.                 | .75   | @ | ...   |
| " German.                  | .06   | @ | .06   | Spanish, lb.             | .48   | @ | .50   | Musk, per lb.              | 7.00  | @ | 8.00  |
| Picric.                    | .26   | @ | .26   | Ergotine, Domestic.      | ...   | @ | 4.00  | Myrrane.                   | .17   | @ | .19   |
| Salicylic.                 | 1.00  | @ | 1.22  | German.                  | 4.00  | @ | ...   | Neroli.                    | 22.00 | @ | 29.00 |
| Sulphuric.                 | ...   | @ | 1.85  | Flowers:                 |       |   |       | Nutmeg.                    | 1.75  | @ | 2.75  |
| Tartaric, Crystals.        | .23   | @ | .23   | Arnica Flowers, per lb   | .11   | @ | .12   | Orange.                    | 1.50  | @ | 1.75  |
| " Powdered.                | .24   | @ | ...   | Chamomile.               |       |   |       | Origanum.                  | .24   | @ | ...   |
| Tannic.                    | 1.05  | @ | 1.30  | German, New, lb.         | .18   | @ | .20   | Pennyroyal.                | 1.40  | @ | 1.50  |
| Alcohol, Grain, per gal.   | 2.18  | @ | 2.28  | Roman, New.              | ...   | @ | .24   | Peppermint, bulk.          | 2.45  | @ | 2.65  |
| (Less rebate.)             |       |   |       | Roman, lb., old.         | .12   | @ | .20   | " GHG.                     | 2.70  | @ | 2.80  |
| Wood, oz. 100.             | ...   | @ | 1.40  | Lavender Flowers         |       |   |       | Rose.                      | 6.50  | @ | 7.00  |
| Diamond Mental             | ...   | @ | 1.50  | Ordinary, per lb.        | .04   | @ | .08   | Sandalwood.                | ...   | @ | 2.85  |
| Alum, Lump, per 100 lb.    | 1.75  | @ | ...   | Select, per lb.          | .15   | @ | .65   | Sassafras.                 | .36   | @ | .38   |
| Ground, per 100 lb.        | 1.85  | @ | 1.85  | Gambier, lb.             | .04   | @ | .04   | Sassafras, Artificial.     | .24   | @ | .27   |
| Antifebrine, per oz.       | .19   | @ | .20   | Glycerin, bbls, lb       | .13   | @ | .14   | Spearment.                 | 1.60  | @ | 1.90  |
| Antipyrene, per oz.        | 1.20  | @ | 1.40  | cases, lb.               | .14   | @ | .16   | Tanay.                     | 2.00  | @ | 3.00  |
| Arrow root, Berm., lb.     | .12   | @ | .25   | Grains, Paradise, lb.    | .07   | @ | .07   | Wintergreen.               | 1.62  | @ | 1.70  |
| St. Vincent, in bbl., lb.  | .11   | @ | ...   | Guarana, lb.             | 1.05  | @ | 1.10  | " Artificial.              | 1.10  | @ | 1.15  |
| Arsenic:                   |       |   |       | Gums:                    |       |   |       | Wormwood.                  | 2.25  | @ | ...   |
| Red Saxon, lb.             | .05   | @ | .06   | Aloes, Barb, lb.         | .06   | @ | .12   | " GHG.                     | ...   | @ | 3.75  |
| White.                     | .05   | @ | .06   | " Cape, lb.              | .05   | @ | .08   | Opium, Natur'l, ca, per    | 2.30  | @ | 2.35  |
| Balsam, Copaiba, lb.       | .31   | @ | .38   | " Curacao, lb.           | .02   | @ | .03   | lb.                        | ...   | @ | ...   |
| Fir, Canada, gal.          | 2.45  | @ | 2.55  | " Socotrine, lb.         | .28   | @ | .40   | Opium, Ordinary,           | ...   | @ | ...   |
| Fir, Oregon, gal.          | .75   | @ | .80   | Arabic, sorts.           | .12   | @ | .13   | Jobbing, per lb.           | 2.35  | @ | 2.40  |
| Peru, lb.                  | 1.35  | @ | 1.50  | Asafetida, lb.           | .10   | @ | .28   | Opium, Powd., per lb.      | 3.25  | @ | 3.30  |
| Tolu, lb.                  | .20   | @ | .22   | Benzoin, lb.             | .30   | @ | .38   | Phenacetin, per oz.        | .85   | @ | .90   |
| Bark, Buckthorn, per lb.   | .40   | @ | ...   | Chicle, lb.              | .38   | @ | .40   | Prussiate Potash, Yel-     | ...   | @ | .22   |
| Cascara Sagrada, lb.       | ...   | @ | .07   | Gamboge, lb.             | .55   | @ | .60   | low, per lb.               | .21   | @ | .22   |
| Elm, lb.                   | .10   | @ | .12   | Guaiac, lb.              | .17   | @ | .25   | Red, per lb.               | .39   | @ | .42   |
| Orange peel.               | ...   | @ | .06   | Kino, lb.                | .75   | @ | 1.00  | Quicksilver, flasks, per   | ...   | @ | .50   |
| Sassafras, per lb.         | .08   | @ | .08   | Mastic, lb.              | .75   | @ | 1.00  | Quinine:                   |       |   |       |
| Soap, lb.                  | .04   | @ | .04   | Myrrh, lb.               | .20   | @ | .38   | Domestic, bulk, oz.        | .22   | @ | ...   |
| Bicarb. Soda, Engl., lb.   | .03   | @ | .03   | Olibanum, sorts, lb.     | .05   | @ | .06   | Domestic, ozs.             | .28   | @ | .29   |
| domestic, lb.              | 2.90  | @ | 3.00  | " tears, lb.             | .11   | @ | .13   | German, bulk.              | .18   | @ | .18   |
| Bichromate, Pot'h, lb.     | 1.05  | @ | .11   | Sandrac, lb.             | .29   | @ | .30   | German, ozs.               | .27   | @ | .28   |
| Bismuth, Sub. Nit.         | ...   | @ | ...   | Senegal, picked, lb.     | .14   | @ | .60   | Roots, Aconite, lb.        | .09   | @ | .14   |
| per lb., bulk.             | 1.95  | @ | 2.00  | sorts, lb.               | .09   | @ | .10   | Althea, cut, lb.           | .15   | @ | .18   |
| Bismuth, Sub. Carb.        | ...   | @ | ...   | Shellac, DC, lb.         | ...   | @ | .51   | Alkanet, lb.               | .06   | @ | .07   |
| per lb., bulk.             | 2.25  | @ | 2.30  | " VSO, lb.               | ...   | @ | .30   | Arnica, lb.                | .12   | @ | .13   |
| Bleach'g Powd., per lb.    | .02   | @ | .03   | " Diam'd I, lb           | ...   | @ | .29   | Belladonna Ger., lb.       | .08   | @ | .12   |
| Blue Vitriol, lb.          | .03   | @ | .03   | " SS, lb.                | .28   | @ | .29   | Blood, lb.                 | .05   | @ | .06   |
| Borax, refined, lb.        | .08   | @ | .08   | " TN, lb.                | ...   | @ | .26   | Calamus, lb.               | .07   | @ | .08   |
| Concentrated, lb.          | .07   | @ | .08   | " Garnet.                | ...   | @ | .24   | Calamus, bleac'd, lb.      | .21   | @ | .24   |
| Brimstone, best ad, ton    | 19.00 | @ | 19.50 | Bleached, lb.            | .26   | @ | .27   | Colchicum, per lb.         | .14   | @ | .18   |
| Bromide Potash, Do-        |       |   |       | Tragacanth, Aleppo, lb.  | .30   | @ | .58   | Colombo, lb.               | .06   | @ | .11   |
| mestic, b'k, lb.           | .33   | @ | .34   | Harlem Oil.              | ...   | @ | .50   | Dandelion, Germ. lb.       | .07   | @ | .08   |
| Bottles, lb.               | .39   | @ | .40   | Indigo, lb.              | .45   | @ | 2.00  | Dogwood, lb.               | .08   | @ | .10   |
| Bromide Ammonium,          |       |   |       | Insect Flowers.          | .10   | @ | .20   | Galangal, lb.              | .04   | @ | .04   |
| bulk.                      | ...   | @ | .43   | Insect Powder, pure, lb. | .16   | @ | .20   | Gentian, lb.               | .03   | @ | .04   |
| Bromide Sodium, b'k.       | ...   | @ | .38   | Iodide Potash, bulk, lb. | 2.70  | @ | 2.75  | Ginseng, lb.               | 1.75  | @ | 2.75  |
| Bromine, bulk.             | .38   | @ | .42   | bot's, lb.               | 2.83  | @ | 2.88  | Ginger, Jamaica,           | ...   | @ | ...   |
| Burgundy pitch, per lb.    | .02   | @ | .02   | Iringlass, Am'r'n, lb.   | .47   | @ | .60   | bled, lb.                  | .17   | @ | .20   |
| Cacao Butter:              |       |   |       | Japan, lb.               | .35   | @ | ...   | Ginger, Jamaica,           | ...   | @ | ...   |
| 12-lb. boxes, lb.          | .30   | @ | .31   | Juniper Berries, lb.     | .01   | @ | .02   | unbled, lb.                | .14   | @ | .17   |
| Dutch A., per lb.          | .34   | @ | .35   | Leaves:                  |       |   |       | Golden Seal, lb.           | .20   | @ | .21   |
| Caffeine.                  | 1.95  | @ | ...   | Belladonna, per lb.      | .11   | @ | .12   | Hellebore, powd., lb.      | .07   | @ | .08   |
| Camphor, ref'd, bbls., lb  | .48   | @ | .49   | Buchu, short, lb.        | .22   | @ | .15   | Ipecac, lb.                | 1.27  | @ | 1.30  |
| cases, lb.                 | ...   | @ | .51   | " long, lb.              | .35   | @ | .40   | Jalap, lb.                 | .22   | @ | .24   |
| Cantharides, Chinese, lb.  | .28   | @ | .30   | Coca, prime, lb.         | .15   | @ | .30   | Kava Kava, lb.             | .30   | @ | ...   |
| Russian, lb.               | .70   | @ | .75   | Damiana, lb.             | .27   | @ | ...   | Licorice, select, lb.      | .08   | @ | .15   |
| Carb. Ammonia.             |       |   |       | Hyoscyamus.              | .09   | @ | .11   | " Pow'd., lb.              | .05   | @ | .12   |
| cases, lb.                 | ...   | @ | .09   | Jaborandi, lb.           | .40   | @ | .48   | Lovage, lb.                | .50   | @ | .55   |
| Cassa Buds, lb.            | .18   | @ | .18   | Senna Alex nat'l, lb.    | .18   | @ | .20   | Mandrake, lb.              | .03   | @ | .04   |
| Castor Oil, cases, lb.     | .15   | @ | .15   | Senna Alex garbled lb.   | .22   | @ | .27   | Orris, Florentine, lb.     | .25   | @ | .35   |
| Barrels, lb.               | .14   | @ | .15   | Senna Tinney, lb.        | .08   | @ | .20   | Orris, Verona.             | .12   | @ | .14   |
| Caustic Soda, 70%, 100 lb. | 2.70  | @ | 2.82  | Stramonium               | .05   | @ | .08   | Pink, lb.                  | .22   | @ | .25   |
| Caustic Soda, 60%, 100 lb. | 2.90  | @ | 3.10  | Licorice, P. & S., lb.   | .24   | @ | ...   | Rhubarb, whole, lb.        | .70   | @ | .80   |
| Chalk, Engl. Precip.       | ...   | @ | ...   | Lupulin, German.         | .60   | @ | 2.25  | Sarsaparilla, Hond, lb.    | .30   | @ | .42   |
| bulk, lb.                  | .04   | @ | .06   | Lycopodium, lb.          | .53   | @ | .55   | Sarsaparilla, Mex., lb.    | .08   | @ | .08   |
| Chloral Hydrate Crys-      |       |   |       | Manna, large flake, lb.  | ...   | @ | 1.25  | Senega, lb.                | .36   | @ | .40   |
| tales, bulk, per lb.       | .95   | @ | 1.05  | Small flake, lb.         | .42   | @ | .45   | Serpentaria, lb.           | .20   | @ | .22   |
| Hydrate crusts, bulk,      |       |   |       | Menthol, Japanese, per   | ...   | @ | 3.75  | Valerian, Belgian, lb.     | .07   | @ | .07   |
| per lb.                    | .02   | @ | 1.00  | lb.                      | ...   | @ | ...   | German, lb.                | .10   | @ | .12   |
| Chlorate Pot. Crys., lb.   | .15   | @ | .15   | Mercurials:              |       |   |       | Saffron, Amn., lb.         | .25   | @ | .35   |
| Pow'd, lb.                 | .15   | @ | .15   | Blue Pill, lb.           | .34   | @ | ...   | Spanish, Valencia, lb.     | 6.50  | @ | 7.00  |
| Chloroform, Bulk, lb.      | .50   | @ | .51   | Calomel, lb.             | .71   | @ | ...   | Spanish, Alicante, lb.     | 5.00  | @ | 5.50  |
| Cinchonidine, Sulphate     |       |   |       | Cor. Sublimite, lb.      | .62   | @ | ...   | Sai Ammoniac, lump, lb.    | .08   | @ | ...   |
| of German, oz.             | .02   | @ | .02   | Mercury and Chalk.       | .30   | @ | ...   | Do., Granulated, lb.       | .05   | @ | .09   |
| Citrates, U. S. P. Iron,   |       |   |       | Oilment, lb.             | .30   | @ | .39   | Sai Soda, Eng., 100 lb.    | .97   | @ | 1.02  |
| Soluble.                   | ...   | @ | .59   | Red Precipitate, lb.     | .81   | @ | ...   | " American.                | .90   | @ | .95   |
| Iron and Ammonia, lb.      | ...   | @ | .55   | White                    | .86   | @ | ...   | Salt peter, crude, per lb. | .04   | @ | .05   |
| Iron and quinine.          | 1.50  | @ | 1.55  | Morphine, bulk, oz.      | 1.00  | @ | 2.05  | Salt peter, Refined, per   | .06   | @ | .08   |
| Iron and strychnine.       | 2.00  | @ | 2.05  | Eights, oz.              | 2.30  | @ | 2.35  | Seeds, Anise, Ital., lb.   | .09   | @ | .10   |
| Phosphate, U. S. P. lb.    | ...   | @ | .57   | Moss, Irish, lb.         | .06   | @ | .06   | Anise, German, lb.         | .06   | @ | .06   |
| Pyrophos, U. S. P., lb.    | ...   | @ | .55   | Irish, bleached, lb.     | .13   | @ | .15   | Anise, Star, lb.           | .22   | @ | .23   |
| Pyrophos, Soluble, lb.     | ...   | @ | .55   | Muriate Potash, per 100  | ...   | @ | 1.85  | Canary, Strychna, lb.      | .36   | @ | .03   |
| Potash, per lb.            | ...   | @ | .49   | lbs.                     | 1.78  | @ | ...   | Canary, Sicily, lb.        | .00   | @ | .04   |
| Soda, per lb.              | ...   | @ | .40   | Naphthaline, flake, per  | ...   | @ | .05   | Canaway, lb.               | .06   | @ | .06   |
| Soda, per lb.              | ...   | @ | .40   | lb.                      | ...   | @ | ...   | Cardamon, Aleppo,          | .65   | @ | .75   |
| Robalt, pow'd, lb.         | .10   | @ | .28   | Naphthaline, Ball, per   | ...   | @ | ...   | per lb.                    | .11   | @ | .11   |
| Cocaine Muriate, per oz.   | 5.25  | @ | 6.00  | lb.                      | ...   | @ | ...   | Celery, lb.                | ...   | @ | ...   |
|                            |       |   |       | Nitrate Silver, oz.      | .48   | @ | .40   |                            |       |   |       |
|                            |       |   |       | Nitrate Soda, 100 lb.    | 1.65  | @ | 1.80  |                            |       |   |       |

| Animal and Vegetable Oils. |     |   |     |                        |     |   |      |                        |     |   |     |
|----------------------------|-----|---|-----|------------------------|-----|---|------|------------------------|-----|---|-----|
| Linseed, City, raw, gal.   | ... | @ | .30 | Cardamon, Malabar,     | ... | @ | .85  | per lb.                | ... | @ | .75 |
| Linseed, City, boiled,     | ... | @ | ... | Colchicum, lb.         | ... | @ | .12  | Coriander, lb.         | ... | @ | .06 |
| gal.                       | ... | @ | ... | " "                    | ... | @ | .06  | Cummin, lb.            | ... | @ | .11 |
| Linseed, Western, raw,     | ... | @ | .53 | Fennel, Germ., lb.     | ... | @ | .12  | Flax Meal, per lb.     | ... | @ | .08 |
| gal.                       | ... | @ | ... | Foenugreek, lb.        | ... | @ | .03  | Hemp, Russian, lb.     | ... | @ | .03 |
| Lard, City, Ex. Winter,    | ... | @ | .49 | Mustard, yel. Cal. lb. | ... | @ | .07  | Mustard, brown, Cal.   | ... | @ | .03 |
| gal.                       | ... | @ | ... | lb.                    | ... | @ | .04  | Poppy, per lb.         | ... | @ | .08 |
| Lard, City, Prime, pres-   | ... | @ | ... | Quince, German, lb.    | ... | @ | .50  | Rape, German, lb.      | ... | @ | .03 |
| ent make, gal.             | ... | @ | .73 | Rape, English, lb.     | ... | @ | .06  | Soap, Castile, Mars,   | ... | @ | .06 |
| Lard, City, Extra No.      | ... | @ | ... | mottled, pure, lb.     | ... | @ | .06  | White, lb.             | ... | @ | .10 |
| 1, gal.                    | ... | @ | .65 | Soda Ash, lb., 48% per | ... | @ | 2.00 | Squilla, white, lb.    | ... | @ | .06 |
| Lard, City, No. 1, gal.    | ... | @ | .55 | 100 lb.                | ... | @ | ...  | Sugar Milk, powd., lb. | ... | @ | .14 |
| West, prime, gal.          | ... | @ | .73 | Sulphur, Roll.         | ... | @ | .01  | Sugar Lead, white, lb. | ... | @ | .11 |

## Animal and Vegetable Oils.

|  |        |   |       |
|--|--------|---|-------|
| Linseed, City, raw, gal.                   | ....   | @ | .30   |
| Linseed, City, boiled,<br>gal.             | .....  | @ | .53   |
| Linseed, Western, raw,<br>gal.             | ....48 | @ | .49   |
| Lard, City, Ex. Winter,<br>gal.            | 1.00   | @ | ....  |
| Lard, City, Prime, pres-<br>ent make, gal. | ..78   | @ | .73   |
| Lard, City, Extra No.<br>1, gal.           | ..55   | @ | .65   |
| Lard, City, No. 1, gal.                    | ..50   | @ | .55   |
| " West, prime, gal.                        | ..72½  | @ | .73   |
| Cotton-seed, C r u d e,<br>grades, gal.    | ..36   | @ | .37   |
| Cotton-seed, Summer<br>Yellow, prime, gal. | ..42   | @ | .43   |
| Cotton-seed, Summer<br>Yellow, off grades  | .40    | @ | .41   |
| Cotton-seed, Winter<br>Yellow, gal.        | ..54   | @ | .56   |
| Cotton seed, Winter<br>White, gal.         | ..55   | @ | .57   |
| Sperm, Crude, gal.                         | ..75   | @ | .80   |
| Sperm, Natural Spring<br>gal.              | ..85   | @ | .86   |
| Sperm, Bleached Spring<br>gal.             | ...    | @ | ...   |
| Sperm, Natural Winter,<br>gal.             | ..90   | @ | .91   |
| Sperm, Bleached Winter,<br>gal.            | ..95   | @ | .96   |
| Whale, Crude, gal.                         | ...    | @ | ...   |
| Whale, Natural Winter,<br>gal.             | ..50   | @ | ...   |
| Whale, Bleached Winter,<br>gal.            | ..50   | @ | ...   |
| Whale, Ex. Bl'ch'd, gal.                   | ..57   | @ | ...   |
| Menhaden, Crude,<br>Sound, gal.            | ..40   | @ | ...   |
| Dark, pressed, gal.                        | ..40   | @ | ..40  |
| Light, pressed, gal.                       | ..42   | @ | ..43  |
| Bleached, Winter, gal.                     | ..45   | @ | ...   |
| Extra Bleached, gal.                       | ..48   | @ | ...   |
| Tallow, City, prime gal.                   | ..70   | @ | .75   |
| Western, prime, gal.                       | ..65   | @ | .70   |
| Cocconut, Ceylon, lb.                      | ..06½  | @ | ...   |
| Cochin, lb.                                | ..06   | @ | ..07½ |
| Cod, Domestic, gal.                        | ..38   | @ | .40   |
| Foreign, gal.                              | ..42   | @ | .45   |
| Red Elaine, gal.                           | ..44   | @ | ..48  |
| Red Saponified, lb.                        | ..05½  | @ | ..05½ |
| Bank, gal.                                 | ..40   | @ | ..41  |
| Straits, gal.                              | ..41   | @ | ..42  |
| Olive oil for tins in                      | 1.50   | @ | 1.85  |
| Olive, Com'n'b'ls, gal.                    | ..58   | @ | .60   |
| Neatsfoot, prime, gal.                     | ..77   | @ | .80   |
| Palm, prime, Lagros, lb.                   | ..54½  | @ | .96   |

# American Druggist and Pharmaceutical Record.

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## EARLY CLOSING.

WE are glad to note that the sentiment in favor of the early closing of drug stores is gaining strength. The movement toward that end, which is erroneously believed to have had its inception in France, has been a feature of English pharmacy for a long time back, while in the United States the practice of early closing is nothing new. True, the efforts looking toward a concerted movement of this kind have been marked by no general unity of action, but on the contrary have been of a spasmodic character and little calculated to effect the end in view.

All large cities contain men of liberal and progressive tendencies who are usually the first to move in matters of this kind, and were there to be taken tomorrow a comprehensive survey of the United States with the object of ascertaining the extent to which the early closing movement prevails, it would be found that the feeling in favor of the early closing is of very general extent, and has its roots among the very best pharmacists of the country.

The difficulty of securing in New York City any action of a concerted nature, when even for the best interests and welfare of the profession or of bringing the pharmacists of New York into line with the rest of the country in any matters affecting the regulation of prices or methods of conducting business, is well nigh proverbial; and time and time again has it been given up as a bad job by those who in their inexperience had earnestly but vainly sought to accomplish an undertaking regarded as hopeless from the start.

## THE CHICAGO MEETING.

MANY things have combined to make the 41st annual meeting of the American Pharmaceutical Association a most memorable one in the annals of that organization.

The fact that the meeting was held in the city selected for the celebration of the quar-centenary anniversary of the discovery of America is in itself an important epoch as testifying to the part which the pharmacists of this country have taken in the Columbus celebration through their representative association.

The coincidence of the issuance of the new Pharmacopœia was another event of interest, while the attendance at the various sessions and the interest exhibited in the proceedings was in every way most satisfactory.

The number of papers presented and the accessions to the list of members indicate that, unlike its medical prototype, it is not on the wane. The presence of several foreigners of note and their participation gave added interest to the proceedings.

In the selection of the president for the ensuing year a well deserved compliment was paid to the energy and intelligence which E. L. PATCH has so freely devoted to the interest of the association and to the advancement of pharmaceutical science.

Probably the most interesting event of the meeting occurred on the opening day when MICHAEL CARTEIGHE, president of the Pharmaceutical Society of Great Britain, announced the awarding of the HANBURY MEMORIAL MEDAL to PROF. JOHN M. MAISCH, the permanent secretary, whose absence and its cause were a source of the most keen regret to all of the members of the association. It should indeed be a source of pride not only to the recipient of the medal himself, but to American pharmacists in general, that a body of European pharmacists have crossed the Western ocean to testify their appreciation, and the appreciation of the pharmaceutical world in general, of the excellent work done by an American.

## THE NEW PHARMACOPŒIA.

IN a new pharmacopœia, as indeed in all new editions of standard works, one naturally looks for changes and improvements, and in the 1890 edition of the U. S. Pharmacopœia just published will be found changes enough and in the nature of improvements to satisfy

the most exacting of reviewers. This is apparent on first taking up the book in the appearance of what may be termed its mechanical parts, which embrace letter-press and binding. With regard to the purely literary features of the volume, what will impress the student at first glance is the great gain which has been made in purity and clearness of expression. This is evident in the opening paragraphs of the preface or preliminary notice in which changes have been introduced that reveal in clear and distinct manner what has been the constant aim and object of the Committee of Revision, namely, extreme conciseness of expression. This reveals itself in many ways throughout the book, and in this respect alone the new Pharmacopœia is a step in advance of the old. As instancing the tendency alluded to, the phraseology employed in the new and the old pharmacopœias in the preliminary note on Percolation may be brought forward. The following sentences from the Pharmacopœia of 1880 will serve to make our meaning clear: "The process of percolation . . . consists in subjecting a substance or *substances*, in powder . . . to the solvent action of successive portions of *menstruum*." In the new Pharmacopœia greater precision is noticeable, as marked in the introduction of the words "*or mixture of*" before *substances*, and the words "*a certain*" before *menstruum*. And this evidence of studied attention to minor details is to be seen throughout the entire work. The expressions of weight and volume in the new Pharmacopœia are based on the units of the Metric system. With reference to the apothecaries' weights and measures, which in this country and England is still the most popular method of expressing weight and volume, it is recommended that in abbreviating the unit gr. the sign should always be written with a small initial. This is a commendable feature as it serves to distinguish better between the grain and the gramme, more especially as the contraction of the word gramme is recommended to be written Gr. with a large initial.

The number of articles dismissed from the new Pharmacopœia are remarkably few as compared with corresponding changes in previous editions. Among what may be regarded as important dismissals from the new work are such well known drugs and preparations as Blistering Paper, Elixir of Orange, Extract of Malt, Inspissated Osgall, Mixture of Magnesia and Asafetida, Oil of Lavender and Stronger White Wine. The remainder, amounting to 92 articles, are drugs or preparations of drugs which were rarely used outside of certain localities. Many of the Latin and English official titles have been changed. In the official Latin titles the number of changes amounts to 57, but the majority of these are unimportant and scarcely deserving of mention. Among the more noteworthy may be cited: *Æther* for *Æther Fortior*; *Aloe Socotrina* for *Aloe*; *Cusso* for *Brayera*; *Creosotum* for *Creasotum*; *Coca* for *Erythroxylon*; *Extractum Belladonnæ Foliorum* for *Extractum Belladonnæ Alcoholicum*; *Extractum Belladonnæ Radicis Fluidum* for *Extractum Belladonnæ Fluidum*;

*Mangani Dioxidum* for *Mangani Oxidum Nigrum*. A new term, "Emulsum," has been introduced to take the place of the word "Mistura" for certain emulsion-like compounds; *Mistura Ammoniaci* is hence described under the head *Emulsum Ammoniaci*, and the same holds good with what have been heretofore known as Mixtures of Almond, Asafetida and Chloroform respectively. *Sapo Viridis* becomes *Sapo Mollis* in the new Pharmacopœia. The number of changes or substitutions in the official English titles represent a larger total, no less than 224 occurring throughout the body of the work. The cause of this marked increase in number is partly accounted for in the uniform changes which the titles of the official salts have been subjected to. *Acetate of Lead*, for instance, now reads *Lead Acetate*, and so on through the entire list of salts and their preparations. *Ointment of Yellow Oxide of Mercury*, to name a common ointment, is now designated *Ointment of Yellow Mercuric Oxide*.

Grave confusion and serious accidents have been known to result from too radical or sudden changes in the strengths of the more important official preparations of revised pharmacopœias, and with regard to this it is satisfactory to note that in the new U. S. Pharmacopœia no changes of great importance have been made in the strength of active drugs which given preparations may contain. *Calx Chlorata* should contain at least thirty-five per cent. by weight of available chlorine instead of twenty-five per cent. as formerly. The strengths of *Decocta* and *Infusa* have been raised from one part in ten to one part of the drug in five. While Extract of Nux Vomica as prescribed heretofore had no fixed alkaloidal strength, it must now contain 15 per cent. of alkaloids by weight. The morphine strength of powdered opium has been changed from 12 to 16% to 13 to 15%. Pepsin is now required to digest three thousand parts of albumen for every one part of the ferment employed. Saccharated Pepsin should digest six times more albumen than was formerly the limit, the increase being placed at one to three hundred. The strength of Tincture of Physostigma has been increased from 1 in 12.15 Cc. to 1 in 6 Cc. Physicians and pharmacists should take due note of this.

The new volume is slightly bulkier than the edition of 1880 and presents many features of superiority over that of the latter, the letter-press and binding being worthy of special praise and marking a decided improvement over the Pharmacopœia of 1880, which, we must confess, did not display much originality in this regard.

The style of type adopted has already been described in this journal, (*vide* AMERICAN DRUGGIST, Vol. xxi., No. 8, p. 124), so we will merely content ourselves in closing this cursory glance at the long looked for manual with a reference to the standing titles of official substances. These differ in few respects from the previous edition. Immediately beneath the Latin official title appears the English official title and beneath it the common English synonym inclosed in brackets. For example, Solution of Hydrogen Dioxide is entitled

in the official Latin **AQUA HYDROGENII DIOXIDI**, and is printed in large, clear Gothic-like characters, while the English official title, which in this instance is **SOLUTION OF HYDROGEN DIOXIDE**, is set in a heavy-faced Gothic, so that a good contrast is obtained between both headings. The English synonym is printed in large Roman capitals and is enclosed in brackets. Each title presents sufficient points of dissimilarity from the other to cause the different heads to stand out clear and distinct.

American pharmacists cannot rate this seventh decennial revision too highly; but it is questionable if they will ever appreciate even to a limited extent the expenditure of time and labor which its preparation has entailed on every member of the Committee of Revision and Publication, and more especially on its erudite and self-sacrificing chairman, DR. CHARLES RICE.

We shall take another occasion to refer at greater length to the different divisions of the volume, including its valuable chapter on the official tests and reagents.

#### ON THE WANE OF THE NOSTRUM.

**"THE LITTLE SCHOOL-MASTER,"** by which we allude to that bright little journal for advertisers, *Printer's Ink*, is not disposed to concur with us in our statement regarding the manner in which it (*Printer's Ink*) would be likely to receive the quotation and accompanying remarks made in a recent issue of this journal with reference to the wane of the nostrum. *Printer's Ink* tells its readers, in fact, that our remarks are "curiously out of keeping with the statement made in another column of the same issue by a contributor who states: 'After a careful investigation I found that the average drug store sold nearly half its goods by the advertisement of manufacturers.'" Quite true, but our contemporary should know that "goods" in this instance means nostrums and has no reference to the legitimate stock in trade of a druggist, so that the conclusions reached by our estimable contemporary are based upon a wrong hypothesis and therefore faulty.

Our views on the whole subject of nostrums, and proprietary medicines generally, are too well known to require elaboration. What we wish to impress upon the apologist of the nostrum dealers is the plain, unvarnished fact that none of the so-called patent medicines have the slightest claim to public favor through the possession of any special properties for the alleviation of human sickness, be the same local, general or specific. The public, however, loves to be gulled and finds a printed appeal hard to resist. We are not so dull as to believe that *Printer's Ink* or any other journal for advertisers will be displeased with the announcement that advertising is necessary to make a business pay, but it should not be pleasant for these journals to know that many of the businesses built up so well by advertising are fraudulent concerns and their wares an imposition on the public.

#### AWARD OF THE HANBURY MEDAL.

**THE HANBURY MEDAL** of the Pharmaceutical Society of Great Britain has been awarded to JOHN M. MAISCH, Phar.D., professor of materia medica and botany in the Philadelphia College of Pharmacy, and permanent secretary of the American Pharmaceutical Association. This great testimonial to the accomplishments of the honored recipient of the award, will be better understood by American pharmacists when it becomes known that the medal, which is of gold, is awarded only to men who have attained the highest excellence in the prosecution or promotion of original research in the chemistry and natural history of drugs.

The medal is a memorial to DANIEL HANBURY, and, as intimated above, is awarded biennially to persons who have signally distinguished themselves as pharmacognists.

The adjudicators of the award are: The respective presidents for the time being of the Linnæan, Chemical and Pharmaceutical Societies, and of the British Pharmaceutical Conference, and one pharmaceutical chemist.

The character of the award can be estimated by a glance at the list of distinguished men who have been honored by its award since the Hanbury Memorial Fund was instituted. The full list, together with dates of award, is given below as follows: 1881, FRIEDRICH AUGUST FLÜCKIGER; 1883, JOHN ELIOT HOWARD; 1885, GEORG DRAGENDORFF; 1887, WILLIAM DYMCK; 1889, GUSTAV PLANCHON; 1891, JULIUS OSWALD HESSE; 1893, JOHN MICHAEL MAISCH.

#### PHARMACEUTICAL EXHIBITS.

**FROM** FREDERICK K. STEARNS, president of the firm of FREDERICK STEARNS & Co., manufacturing pharmacists, Detroit, we are in receipt of the communication printed below regarding the exhibits of pharmaceutical products at the World's Fair:

I think it but proper to call your attention to a matter in which you could be of great assistance to the manufacturing pharmacists of this country who are exhibiting at the World's Fair. You may not be aware that such concerns, including ourselves, were relegated to positions in the gallery of the Liberal Arts Building, where not one visitor in a hundred to the building is likely to go, the reasons being that they are either too exhausted to climb the stairs, or ignorant of there being fine exhibits in the gallery. By making a note of this in your columns, and writing something up about it, stating that all the manufacturing chemists and pharmacists are located in the gallery, and that their exhibits are well worth a visit from all those interested in medicine or pharmacy, it would do much to help the good cause. As it is now, unless one especially hunts where the pharmaceutical displays are made, he is not likely to ever see them.

We are the more pleased to give prominence to the communication of MR. STEARNS at the present time on account of the fact that from now up to the close of the Fair the pharmacists will form a goodly proportion of the visitors.

*Written for the American Druggist and Pharmaceutical Record.*

## THE SUCCESSFUL DRUGGIST.

### How to Manage a Retail Drug Store.

By EUGENE P. SOUTHWICK, BRADFORD, PA.

First of all a druggist, to be successful, should be adapted to his business. As is generally known, in most country towns and in some small cities druggists carry groceries as well as drugs, which, in my opinion, is not right. A first-class pharmacist should carry a full line of pure drugs, medicines, chemicals, and dye-stuffs, also patent medicines, toilet articles, sponges, brushes, perfumery, etc., displaying them to the best advantage. They should be kept clean and in salable condition, and there should never accumulate an overstock of any article.

#### WINDOW TRIMMING.

The show windows of a drug store offer the best advertising the druggist can wish; seasonable goods should be displayed therein, and never should they be overcrowded or allowed to remain in over a week. Attractive window displaying is one of the arts that every would-be successful druggist should study. I think all will agree with me that the windows of a drug store are more noticeable to the public than any other class of business, but when the articles displayed look as if they were crowded into the window for the want of room in some other part of the store, all covered with fly specks and insect powder (as are also the windows and lamps), then the display ceases to be attractive.

#### THE PRESCRIPTION COUNTER.

The prescription counter is one of the principal fixture necessities of a first-class pharmacy, is usually situated in the rear of the store, and should be stocked with small quantities of all the drugs and chemicals which are most generally used in compounding prescriptions; also supplied with a complete assortment of the different-sized powder and pill boxes, graduates, spatulas, etc. Shop bottles should not be too large. Tincture and fluid extract bottles should not hold over eight ounces, as tinctures deteriorate by age and look better and are better when made often. Every druggist should be capable of making his own tinctures, and should have all of the necessary appliances for doing so.

#### THE SODA FOUNTAIN.

The soda fountain is one of the most profitable as well as the most attractive fixtures of a first-class pharmacy, and there is none other which requires comparatively so small an investment of capital or which can be so successfully undertaken without previous knowledge or experience. There are no real live druggists conscientiously desirous of producing and dispensing pure and wholesome beverages who cannot attain very satisfactory results in this line; however, two absolute requirements are necessary to make the soda water dispensed profitable, viz., purity and wholesomeness.

#### THE PRESCRIPTION CLERK.

The principal necessity of a well regulated pharmacy is the practical prescription clerk, whose business should be to compound prescriptions and wait upon customers. No first-class drug clerks are ever overpaid; their working hours are generally from 7 o'clock A.M. to 10 or 11 P.M., and they get from \$10 to \$18 per week. There are no other class of clerks, to my knowledge, that have to work so many hours for the same pay as the drug clerk; neither are there any that have to pay from \$400 to \$500 for their experience as the Ph.G.'s do for theirs. A prescription clerk

should never be obliged, as is very often the case, while in the act of compounding a prescription, to dispense soda water. A boy should be hired for that kind of business, as is usual in most well conducted drug stores.

#### WHAT IS EXPECTED OF HIM.

A competent prescription clerk should know at a glance whether the articles in the prescription before him are incompatible or not, the solubility of different chemicals and alkaloids in the numerous solvents, also the poisonous character of all chemicals and alkaloids and their doses, especially the ones principally used in physicians' prescriptions.

The druggist should never allow his clerk to overcharge for any article, as there is nothing gained by it; neither should he allow him to sell for less than he would himself to gain the confidence of customers with the view of making himself a fixture at the expense of his employer. If this is practiced to any great extent, the owner will eventually find his clerk assuming ownership and his prices demoralized. The truthful drug clerk will not take advantage of his employer in this way; he should work wholly for his employer's benefit, and thereby gain the confidence of both customers and employer.

#### CAREFUL BUYING.

A practical pharmacist will not rely altogether on his clerk. As a rule, he ought to do the buying himself. There is a great deal made by close buying. He should take the best drug journals, *keep posted on the market prices*, and buy accordingly; he should also have a Remington's Practice of Pharmacy, and the latest edition of the United States Dispensatory.

The cutting on prices, which is practiced by most druggists, is wrong; there is nothing made by this method. The druggist who maintains a uniform price for patent medicines makes more in the long run than those that sell a \$1 bottle at a profit of two cents. The prices of drugs and chemicals ought to be governed by the market changes, the same as are flour and sugar. For instance, if a druggist buys morphine one month and is obliged to buy again the next month at an advance of 75 cents an ounce, he should not be obliged to sell at the preceding month's prices because his neighbor druggist does. The price should be raised or lowered according to the market fluctuations.

#### THE PHYSICIAN AND THE PHARMACIST.

The practical pharmacist who has received his diploma by hard work and study as a Ph.G. should be upheld in his profession the same as the doctor. Will the time ever come when the two professions will work in harmony for each other's benefit, and not, as is usual in a great many country towns, trying to cut each other's practice? The physician must, sooner or later, realize that public sentiment does not sanction his dispensing. Is it proper or justifiable that physicians should buy their drugs of their druggist (by whom they are held in high esteem) at a profit of ten per cent. or less and do their own compounding? What has the druggist to rely upon for his business? It would be unreasonable to suppose that he would not recommend patent cure-alls to his customers by way of getting even with the doctor who ruins his prescription business. This policy, so generally practiced by physicians throughout the country, would be called quackery in larger places.

Harmony between the physician and pharmacist is necessary before the existing evil can be overruled.

The successful druggist should buy only pure drugs and chemicals, and should be capable of analyzing them to see that they are fully up to the pharmacopœial strength and maintain the highest standard of

excellence for his preparations; hiring only competent help and keeping constantly at work himself, with the view of elevating and extending his business; be accurate, polite, not overbearing, using all customers alike.

### THE MICROSCOPE IN PHARMACY.\*

BY JOSEPH HUNT, A.M., M.D.,

Brooklyn College of Pharmacy.

It is a matter of surprise that so few pharmacists make use of the microscope; and that its value in the shop is so little understood by them as a class. Pharmacy like the other arts is advancing; each succeeding generation demands a more advanced knowledge; it will not do for the druggist of the future to stand still and confine himself to the same methods which the pharmacist of a decade ago found sufficient, but he must rather take up the pestle and with it pound out new methods and new ideas.

The medical profession cannot do without the pharmacist, but they demand that he shall be something more than a skilled laborer, or a mere merchant; that he shall have more knowledge than that required to sell proprietary nostrums, or ready-made elixirs. The pharmacist of the future will possess not only the usual knowledge of practical and theoretical pharmacy, but he shall also be proficient in chemistry and botany; and it is as chemists and botanists that they will find the microscope indispensable.

Members of the medical profession regard it as invaluable in their practice; a single glance through the tube often affording means for a positive diagnosis of disease which could be gained in no other way. As chemists, the pharmacists will be enabled to distinguish precipitates which seem alike to the unaided eye, and to study reactions too minute to be seen without its aid; as well as to recognize forms of crystals, which could not otherwise be differentiated; but as botanists they will find it indispensable, since all our knowledge of the minute structure of plants, and of the phenomena of vegetable life, is derived from the use of the microscope.

When we stop to consider that the art of pharmacy is based upon the application of these two sciences, chemistry and botany, one wonders that we have done so long and so well without it. The days of the old easy-going drug vender are numbered; keen competition is even now driving the incompetent to the wall; and the physician and the ordinary customer will speedily learn who is the scientific pharmacist, who diligently takes every precaution to guard his customers against the uncertain action of doubtful medicines.

To illustrate the uses to which the instrument may be put by the skillful apothecary, I will suggest examples intended as illustrative and not go into the subject farther than to hint at some of the multitude of uses which will multiply as one becomes proficient in the use of the instrument.

Probably there is no branch of pharmacognosy so difficult as the recognition of the adulteration in powdered vegetable drugs. So long as the drug is in its natural state but little difficulty is experienced, as all pharmacists are supposed to be familiar with the natural appearance of the root, or bark or leaf which he is handling; but when it is *ground* the writer knows of nothing so satisfactory as the microscope, used by one who is familiar with the characteristics of the pure article. As an illustration the writer recently

read a report of the examination of 42 powdered drugs, among which but thirty were found to be pure. The following were found to be adulterated: Asafetida, jalap, rhubarb; starch in powdered cinnamon, wheat-flour in powdered elm-bark, mustard with tannin; podophyllum, valerian; corn-meal with fœnugreek, and inferior gum with crystals of silica in gamboge.

Jalap is sometimes not only adulterated as a powdered drug, with ordinary adulterants, but inferior or non-official varieties of root which look very like the true official jalap are substituted for it. The microscope alone will readily expose the difference by showing the observer the abundant acicular crystals of calcium oxalate, which characterize the root of the *mirabilis jalapa* or four o'clock. And the distinctive microscopical appearances in the starch and resin, presented in the Tampico and Vera Cruz jalap. In the former the starch is arranged in little compact masses in the cell, while in the latter it occurs in grains irregularly united, or, if isolated, much larger than those of Tampico jalap; with tubes of the last named the resin occurs in smaller masses than in the Vera Cruz jalap. (*Phar. Jour. and Trans.*, 1886, p. 917.)

Powdered ipecac is frequently adulterated with potato starch and sometimes with corn meal, almond meal or licorice. When the adulterant is almond meal, it is easy to recognize the seed-coats and also the central part of the almond, which is composed of thin-walled hexagonal cells, smaller than the cells of the *ipecacuanha*, loaded with oil-drops and entirely free from starch grains. Minute spiral vessels are frequently scattered through these cells. The outer seed-coat, or dark-brown, scurfy part of the almond is made up of large oblong cells, with peculiar pits covering the cell wall, these cells being about  $\frac{1}{10}$  inch broad and nearly twice as long.

The microscopical characters by which drugs derived from the vegetable kingdom may be identified, are based upon the anatomical characteristics of the plant under examination. Peculiar arrangement of cells into special organs or tissues; and peculiar cells and cell contents, such as starch, resins, crystals, etc., which are sometimes visible in thin slices of the part, or if not immediately visible may be brought out by the action of suitable reagents.

It is needless to say that everything organic, either animal or vegetable, is made up of cells, which consist essentially of an outer wall or membrane of cellulose, which may contain various liquids, semi-solid, or solid matters, and that these cells vary greatly in size, shape or markings, which differences are readily apparent under the microscope. These variously marked cells are so minute that in the process of powdering a sufficient number will escape mutilation to enable the adept with the microscope to readily detect their presence, or the presence of cells not belonging to the special drug under examination.

More characteristic differences, however, are found in the starch grains than in the cell structure; for they vary greatly in *size* (though there is a pretty constant average for each kind), *shape* (which is quite characteristic), and the position of the *hilum*, which appears as a dark spot in some constant situation on the granule and thereby serves to distinguish granules closely resembling each other in other respects, as between potato and arrow-root starches, which are about the same in size and shape, but in the former it is on the small end, and in the latter in the large end of the grain. The starch of canna has the reputation of being the largest, and rice starch among the largest known.

Crystals are of such general occurrence in widely

\* Read at a pharmaceutical meeting of the Brooklyn College of Pharmacy and communicated by the author.

different orders of the higher plants, that there are perhaps none in which they may not be detected. Most of these crystals are of calcic oxalate, but calcic carbonate, calcic phosphate and sulphate and perhaps potassium tartrate and oxalate, etc., are met with. These occur either singly or in groups; either separate or barely coherent, or in various forms of combination, each of which is characteristic of the plant in which it is found. When solitary and simple they are usually octahedra or prisms, and their aggregations are combinations of these. Thus we have described according to their forms and groupings, raphides, that is, needles; sphæraphides, etc.

Besides these we have the characteristic resins, oil-drops and other cell contents and the plant-hairs and other portions of vegetable anatomy which the drug mill does not destroy; so that a glance through the tube of the instrument tells us what are present, and our previously acquired knowledge of the normal drug, whether what we see in the field of the instrument belongs there or not.

The examination of plant tissue with the microscope requires but few accessories and in general but little manipulative skill. By cutting thin slices with a sharp knife or razor in various directions the different cells, ducts, and fibers which make up the structure will be brought into view. Dried roots and other portions of plants may require maceration to soften them before making sections.

Crystals may be brought out plainly by maceration in turpentine. A polarizing attachment to the instrument facilitates their examination, as, under the polarized light, crystals as well as the starches stand out in brilliant relief against a dark background.

Starches may be seen in the powdered drug or section and it is by their means principally that you will be able to recognize sophistications, since starch or meal is the most common adulterant.

It is useful to distinguish between various seeds which look very much alike; for instance, the seeds of the star-anise (*Illicium Anisatum*), cannot by the naked eye be distinguished from the seeds of the shikimi fruit (*Illicium Religiosum*), which is poisonous.

The pollens, such as lupulin, often contain foreign material. One specimen of lupulin examined by the writer contained more than 75 per cent. by weight of fine particles of earth and gravel, the probable result of having been gathered on a windy day.

Commercial powdered colocynth often contains a considerable portion of the powdered seeds, occasionally some of the rind and sometimes also a considerable portion of wheat starch; in one instance as much as 75 per cent.

Were it necessary the writer might go on indefinitely citing instances illustrating the value of the microscope in the druggist's laboratory, if he would keep abreast with his profession and if he is really conscientious in examining the quality of the drugs he dispenses.

Many pharmacists are without doubt deterred from owning instruments because of the erroneous impression that a really efficient one is expensive.

From thirty to fifty dollars is all that is necessary to procure a simply constructed yet thoroughly good instrument sufficient for the really necessary work. By getting a good stand in the first place, various accessories, such as polariscope, additional eye-pieces, objectives, etc., may be added as the needs and purse of the owner develops.

The above lecture was supplemented by showing a number of photomicrographs of pure and adulterated drugs by means of the oxyhydrogen lantern, the characteristic differences being explained.

*Written for the American Druggist and Pharmaceutical Record.*

## How to Keep Prescriptions.

BY ALBERT E. DERTER, PH.G.,

Philadelphia, Pa.

The constant wear and tear upon these valuable little documents call loudly for a practical, economical, and thoroughly preservative method of keeping them.

The two most general methods in use, putting the papers on a long file and pasting them in a book, have their obvious faults, yet remain prominent and always uppermost in the mind of the pharmacist who starts in business for the first time as well as with the one who has spent a lifetime behind the counter. The long file, consisting simply of a straight heavy wire fastened to a block of wood, soon affords the opportunity of wearing off the corners and tearing prescriptions more or less, when flung on the counter, or hastily thrown aside, or hung up on one of a row of nails or hooks as the case may be and allowed to jostle into place the best way possible. Then in the case of those prescriptions which are pasted in books, another serious obstacle presents itself in the fact that memoranda are frequently written on the back of a prescription which are of importance in regard to the compounding or contents and which would thus be obliterated and require the expenditure of additional time in copying. Besides these there are other vital points which call for an improved system of caring for this very important department in every pharmacy.

The difficulty cannot be overcome without some expense, of course, but a minimum of this can be attained as well as a maximum and this must be left to the choice of the pharmacist.

The idea which the writer would suggest as combining neatness and compactness is as follows:

A cabinet consisting of two parts, both of which might form part of the prescription counter. The upper part of cabinet is to be divided into twelve equal spaces, one for each month in the year, and the name of the month represented to be printed on front of dividing piece. In this way the prescriptions of each month will be filed separately and can be readily referred to by removing the file, which would be made to fit space easily and after the pattern of a Shannon bill file. The prescriptions would thus be held firmly and with less likelihood of tearing than when fastened on a single file. Access may be had to this portion of cabinet through either sliding or swinging glass doors.

The lower portion will, of course, be of the same width as the upper, allowing six inches square to each space. The base of the cabinet may consist of any number of drawers six inches square from twelve up; each drawer having a file rod through the center running lengthwise, and arranged so as to be permanently fastened with nut and thread after the prescriptions for the year have been filed; these being transferred from the monthly file at the end of a year. If necessary two drawers may be used for one year, in which case the date of year would, of course, be the same on the front of each drawer.

The advantage to be derived from this manner of taking care of prescriptions is very plain to be seen, for instance, in renewing a prescription of some years back, say ten or twelve, the drawer-file would present the prescription as clean and almost as fresh looking as when first put up; always having been protected from dust and dirt, and not having been battered and torn while hanging around a dirty cellar among a lot of other files whose fate has been one of partial destruction and almost total obliteration in many cases.

When practicable the prescription cabinet is

always the surest way of taking care of prescriptions, of keeping them, in short, and that is the object of our query, to find a plan which can be adopted by the pharmacist without adding too many items to his already weighty expense account.

Trusting that the ideas herein contained may not be altogether without value and may possibly meet the approval of brother pharmacists who well know how often this subject becomes a matter of serious conjecture and discussion, I will close by inviting a free discussion as to the merits of the various plans proposed.

#### Poisonous Plants and Their Poisons.\*

The author prefaces his article with an explanatory paragraph in which he states his desire to present a new field of inquiry to those who have not previously paid any attention to the most wonderful properties developed in the world of plants. Coming to the subject of his paper he proceeds to define a poison.

What is a poison? And however easy to answer it may at first appear, it will be found by no means so. The dictionary's definition of the term is notably incorrect. The dictionary has it that a poison is "that which is destructive or injurious to vitality." Now this sounds well enough, yet it is not sufficient. A poison is a substance which can exert, by its chemical action, an injurious influence on the vitality of a healthy organic body or tissue.

But it must be acknowledged that to define correctly what a poison is, is very difficult, if not impossible, as many substances injurious to some organisms are by no means so to others. For instance, the deadly nightshade and the henbane do not poison pigs. The water-hemlock, so dangerous to man and notably so to cattle, is perfectly harmless to dogs, as is the celandine to sheep and the spurge to goats. Noteworthy, too, is the case quoted in the "Origin of Species" of white sheep and pigs being injured by certain plants, while dark-colored individuals escape. "Professor Wyman," adds Darwin, "has recently communicated to me a good illustration of this fact. On asking some farmers in Virginia how it was that all their pigs were black, they informed him that the pigs ate the paint-root, *Lachnanthes*, which colored their bones pink, and which caused the hoofs of all but the black varieties to drop off" ("Origin of Species," sixth ed., p. 9). The toxic effects which such vital substances as blood and pollen produce in some cases are most remarkable. A few drops of the blood of a mammal, if introduced into the circulation of a bird, causes a certain and intensely violent death by the instantaneous destruction of the vitality of its nervous system (Dieffenbach). Fritz Muller has recorded some species of plants, the pollen of which, if placed on the stigma of the same flower, acted on it like a poison, the flower fading and falling off, and the stigma turning brown and decaying. Sugar is said to kill almost instantaneously some reptiles, like frogs and lizards. The dose or quantity of a substance required to poison an animal also differs greatly; while a very small quantity of opium is sufficient to kill a man, it requires two drachms to kill a dog, and as much as two ounces for a cow; yet one ounce given to sheep, it is said, will have no bad influence on these animals. Swallowing two or three drachms of arsenic will have no dangerous consequences for a horse. Man, as well as animals, can gradually become used to some poisons. Mythrdates, king of Pontus, had made a special study of poisons, and had even written a book on them. He accustomed his body to the strongest of them by taking at first small but gradually increas-

ing doses, so as to protect himself against being poisoned. The opium smoker can stand a quantity of that drug that would be most dangerous to us.

In spite of these anomalies, the definition of poison given above is probably correct, and keeping it in mind we will now throw a rapid glance on the nature of poisons. Poisons are represented in all the three kingdoms of nature; there are, therefore, *animal*, *vegetable* and *mineral* poisons. And without taking into account the kingdom from which they proceed, poisons may be again divided by the different modes of action of their deleterious effects. Those called acrid or irritants act by inflaming the parts with which they come in contact. The plants whose poisons belong to this class are the spurge, colocynth, savin, most *Ranunculi*, the meadow-saffron, water-dropwort, etc. The narcotics, without producing any immediate change on the surface exposed to them, act on the brain and nerves, inducing a tendency to insensibility and torpor. The principal are the hen-bane, bitter-sweet, *Lactuca virosa*, and all plants containing opium or prussic acid. The third class, that of the narcotic irritants, partakes of the qualities of the other two classes, and comprises the strongest poisons. The most common plants of this class are the deadly nightshade, thorn-apple, tobacco, foxglove, hemlock, cowbane, "nux vomica" and the poisonous fungi. Camphor, turpentine, ether, and alcohol also belong to these.\*

The toxic properties of plants are due to certain substances contained in them, most of which have already been studied and extracted by chemists. These substances are generally of an alkaline nature, and called *alkaloids*; some are acid. The vegetable kingdom produces about 1,000 alkaloids, of which about 200 have become at all accurately known—a good number, considering that their existence was discovered only three-quarters of a century ago, *i. e.*, by Lerturner in 1816. Most of them are violent poisons; among the best known I may name morphine, codeine, strychnine, aconitine, nicotine, coneine, atropine, hyoscyamine, etc. The acids are either united to alkaloids or to oils.

There are various ways by which these poisons may be accidentally introduced into the system. Through the nose, in the form of odors; through the lungs, by inspiration; by the mouth in the form of food; through the skin, by absorption; and, very readily by recent wounds. They act either on the nerves and brain, on the blood, or on the tissues of the body. Opinions seem to differ as to whether poisoning in general takes place primarily through the nerves or through the blood, and facts are brought forward to support both theories. It is, for instance, said, on the one hand, that after cutting the gastric nerves no poisoning takes place in some cases, and that a solution of emetic tartar, if injected into the veins, causes nausea in the stomach by acting through the nerves. On the other hand, it is stated that prussic acid, which otherwise acts on all tissues, animal and vegetable, has no influence whatever if brought in contact with the nerves only. Strychnine produces no effect unless it gets into the blood, as the celebrated German physiologist, J. Muller proved by the following interesting experiment that poisoning cannot take place through the nerves alone. He exposed the nerves of the legs of some toads, so that the calf and thigh were only connected by the bones and nerves. Then he placed the legs for a long time in an acid solution of morphine and a concentrated solution of opium. Many hours afterward the toads were still alive and perfectly sensible.

(To be continued.)

\* From a popular article on the subject contributed to *Science Gossip* by J. Guardia, F.R.S.M.

\* The author refers in certain instances to the flora of England.

## Pharmaceutical Progress.

**Sunlight an Antiseptic.**—The results of experiments by Prof. Marshall Ward tend to prove that the action of sunlight is a far more powerful agent in the purification of the atmosphere than has hitherto been recognized. The author has discovered, for instance, that the anthrax bacillus, while it will withstand the greatest extremes of temperature, is killed by direct sunlight. Water is also thus purified.

**Red phosphorus is not amorphous**, says Rettgers (*Zeit. f. Anorg. Chem.* 1893, 399), as he has ascertained by examining specimens microscopically. He therefore proposes to drop the term "amorphous" as applied to this modification of the element.

**Decayed meat is detected** in the meat inspection bureau of Dresden by means of the ammonium chloride test of Ebers. The solution used consists of 1 part of hydrochloric acid, 3 parts of alcohol and 1 part of ether. If on bringing a glass rod wet with this solution near the suspected meat vapors (of ammonium chloride) are given off, the meat is tainted and its sale for food is forbidden.

**Proof of sterilization of surgical dressings** can be obtained, says Prof. Manthner (*Deutsch Med. Zeit.*), by applying to the dressing a harmless color which will change when heated to 100° C. [212° F.] Such a color is furnished by the following preparation: Solution of ammonium acetate 150 parts, water 150 parts, 20 per cent. alizarin paste 5 parts. This mixture should be well shaken before being applied to the dressing. It is brown in color but will turn to a bright red on being heated to 100° C.

**Polarimetric Examination of Gums.**—Guichard has examined the rotatory powers of the various acacia gums in the market and finds that they form three series: those of Galam, Mogador, and Australia have a rotatory power near +16°. Arabic, Aden, and Amrad gums border upon +32°, while gum Ghatti has a rotatory power close upon +64°. The differences may be explained by the view that the gums are mixtures of several dextro-rotatory and lævo-rotatory substances.—*Chemist and Druggist*.

**Cineol** may be detected in volatile oils, according to Hirschsohn, by putting 5 to 15 drops of the oil in a test-tube, shaking it with  $\frac{1}{4}$  to  $\frac{1}{2}$  grain of iodol, and a few drops more of oil added, if necessary, to dissolve the iodol. The mixture is set aside for some time, when, if cineol is present, a crystalline compound separates on the sides of the tube. The oil is poured off, the crystals washed with petroleum ether and a solution of potash poured over them, when the odor of cineol is produced.

**The Musk-ox.**—The animal commonly known as the musk-ox (*Ovibos moschatus*), though approaching in size the smaller varieties of oxen, is in structure and habits closely allied to the sheep, its affinities being well expressed by the generic name *Ovibos*, bestowed upon it by De Blainville. The specific name, as also the common English appellatives, "Musk-ox," "Musk-buffalo," or "Musk-sheep," applied to it by various

authors, refer to the musky odor which the animal exhales. This does not appear to be due to the secretion of a special gland, as in the case of the musk-deer; but it must be observed that, except as regards the osteology, very little is known of the anatomy of this species. It about equals in size the small Welsh and Scotch cattle.—*Nature*.

**Estimation of Mercuric Chloride.**—The method which Vignon used for estimating mercuric chloride in his experiments on sublimate cotton was to take 50 c.c. of a 1 per mille solution of the chloride, add 5 c.c. of pure hydrochloric acid and 10 c.c. of a clear saturated solution of hydrogen sulphide. The yellow precipitate obtained rapidly turns black; it is filtered through a filter, weighed to  $\frac{1}{10}$  mgrm., washed, dried, and pressed. In solutions containing one part mercuric chloride in 10,000, a gravimetric process cannot be applied with accuracy.—*Chemist and Druggist*.

**Testing Indiarubber.**—According to M. Vladimiroff the following are the tests to which this substance should accord: (1) Caoutchouc should not give the least sign of cracking when bent to an angle of 180°, after five hours' exposure in an air-bath at 125° C. (the specimens 2.4 inch thick). (2) Caoutchouc having not more than half its weight of metallic oxides should bear stretching five times its length before rupture. (3) Caoutchouc exempt from all foreign matter except sulphur should be capable of stretching at least 7 times its length before rupture. (4) The extension measured just after rupture should not exceed 12 per cent. of the original length (with given dimensions). (5) Suppleness may be determined by calculating the percentage of ash after incineration. This may form the basis of choice for certain uses. (6) Vulcanized caoutchouc should not harden in cold.—*Chemist and Druggist*.

**Gynocardic Acid.**—M. Petit states (*Jour. Phar. et Chem.*) that this acid can be prepared in the following manner: take any convenient quantity of Chaulmoogra oil and saponify it by means of soda lye (36°). Then add to the mixture twice its weight of water and bring to a boil, constantly agitating. Test to see when saponification is complete, then add common salt in sufficient quantity to throw out the soap; cool, collect the soap, and wash rapidly with a little water. Now decompose the soap by treating it in a suitable vessel with sulphuric or hydrochloric acid, heating to aid decomposition. Wash the freed acid with warm water, then dissolve in 60 per cent. spirit in the proportion of 100 grammes of the acid in a liter of spirit, warming to dissolve. The acid crystallizes out from the spirit, and more can be obtained by distilling the filtrate. The acid is finally freed from alcohol by warming on a water-bath.—*Through Chemist and Druggist*.

**To Remove Odors of Creasote and Iodoform.**—To free the hands from the smell of iodoform, creasote, or guaiacol, wash them with water in which ground flaxseed has been boiled and drained off. Objects smelling of iodoform should be washed in tar water to which

has been added some essence of wintergreen. Rooms smelling of creasote or iodoform can be deodorized by burning coffee berries in them. Pills of creasote over which freshly ground coffee has been sprinkled lose their disagreeable odor.

**Erroneous Idea of Ptomaines.**—The *British Medical Journal* points out that not only the community at large, but also many physicians, seem to have wrong ideas about the chemical products of bacteria. The principal error consists in supposing that the toxic properties of these substances can be destroyed by heat such as is sufficient to destroy the bacteria themselves. Many of these toxins are very stable against heat; and although the bacteria which produced them may be entirely destroyed, the poisonous properties of the substance may remain. Canned goods, if they contained these products when they were put up, may be poisonous, even though sterile. Another mistake is to suppose that the ptomaines are necessarily dissolved or distilled by boiling, but they may remain hidden in the center of a piece of meat. It is perfectly possible to suppose that one sardine only out of a box may be poisonous.

**Nitrogen-fixing Micro-organisms.**—Professor Berthelot, in a recent communication to the Academy of Sciences, states that from a series of experiments upon samples of earth taken from the Botanic Garden of the Ecole de Pharmacie it appears that the micro-organisms capable of fixing free nitrogen from the air belong to widely varying species, but the chief agents are certain bacteria of the soil, seven species of which were isolated. The carbon and nitrogen of the atmosphere do not appear capable of supporting the life of these bacteria, and their nourishment is chiefly derived from the decomposition of sugar, tartaric acid, and other hydrocarbons supplied by higher organisms. If there is an abundance of combined nitrogen at hand, the bacteria flourish more profusely, and their absorption of free nitrogen, though placed beyond doubt, has certain definite limits. On the whole, it seems that the carbon-fixing and the nitrogen-fixing organisms fulfill mutually supplementary functions.

**Poisoned Arrows.**—Dr. Le Dantec, in a work on the telluric origin of the poison of arrows, gives an account of recent researches into the history of this question, the origin of the poison and the treatment of the wounds. He has subjected the arrows to careful examination and experiment in his laboratory. The war arrows of the natives of the New Hebrides are composed of a reed containing a center of hard wood, with a fragment of human bone, carefully scraped, so as to form a delicate point. This point is covered with a black plaster, which constitutes the poison. From the experiments which have been made it seems that these arrows are poisoned with the earth of the marshes. This earth contains two pathogenic microbes—the septic vibron and the bacillus of tetanus. Dr. Le Dantec observes that these experiences are an argument against the equine origin of tetanus, since there have never been any horses in the New Hebrides.

**The Detection of Saccharin in Beer.**—F. Gantter writes (*Zeitsch. f. anal. Chem.*) that Bornstein (*Zeitsch. f. anal. Chem.*) has recommended as a most delicate reaction for saccharin heating the substance to be tested with resorcin and strong sulphuric acid, fluorescein being formed. The author, who examined a number of samples of beer for saccharin, found that the reaction is not conclusive of the presence of saccharin, since beer perfectly free from that body yields a strong fluorescence when the residue from the acid and ether treatment is heated with resorcin and sulphuric acid. He finds that hop-resin and ordinary

colophony behave similarly in this respect to saccharin. He relies solely upon the taste of the residue, and operates as follows: 500 c.c. of beer are evaporated to a syrup precipitated with alcohol, the alcoholic solution acidified with HCl, and then evaporated. The residue is shaken out with ether, the solvent evaporated, and the residue tested. He is of opinion that the method proposed, which depends upon the detection of sulphur in such residue is of no use, since the amount of saccharin which is likely to be present in half a litre of beer will be exceedingly minute; consequently but faint indications of sulphuric acid will be obtained after fusion with carbonate and nitrate of potassium.

**Constituents of Hops.**—Briant and Meacham point out that hops owe their preservative power, according to Hayduck, *Trans. Inst. Brew.*, vi., 149, to three resins they contain:  $\alpha$ -resin, precipitated by lead acetate;  $\beta$ -resin, non precipitable by the same agent; and  $\delta$ -resin, harder than  $\beta$ , while soluble in petroleum ether, which does not affect either of the others. A distinct antiseptic influence, especially upon lactic fermentation, is possessed by  $\alpha$ , but it has no effect upon the acetic ferment and *sarcina* (*Pediococcus cerevisia*). All the resins are bitter,  $\delta$  less so than the others, while  $\alpha$  dissolves most readily. The constitution of the tannin of hops is said to be not yet understood, and there are believed to be several tannins present. The practical preservative power of hops is not always found to coincide with the proportion of tannin present. In hop oil various observers claim to have found a terpene-like body, an oxygenated hydrocarbon, valeric anhydride, which sometimes oxidizes to valerianic acid and imparts a peculiar cheesy odor to old hops, and cholin, a substance found also in brain and nerve matter. Little is known of the nitrogenous matters in hops, but the presence of small quantities of asparagine has been demonstrated. A fermentable sugar and diastase have also been shown to be present.

**Characteristics of Guaiacol.**—At a recent meeting of the Berlin Pharmaceutical Society, Dr. H. Thoms described the characteristics of crystallized synthetic guaiacol. He agrees with Behal and Choay that the crystals melt at 28.5° C., boil at 205° C., and that the specific gravity is 1.1365 at 19° C. Generally it is stated that sp. gr. 1.117 at 15° C. is the factor for pure guaiacol, and that its solubility in water is 1 in 200; but Dr. Thoms says that these factors are wrong. He finds the solubility in water to be 1 in 50. Ten cubic centimeters of a 1 per cent. alcoholic solution of synthetic guaiacol gives with a single drop of ferric-chloride solution (10 per cent.) an emerald-green color; 1 drop of ferric-chloride solution diluted with water ten times gives a blue color which quickly changes to emerald-green. A drop of this diluted ferric-chloride solution with 10 c.c. of 0.5 per cent. aqueous solution of guaiacol gives an evanescent blue color changing to brownish-red. On standing this becomes dark brown. A similar brownish-red color is obtained by adding a few drops of potassium chromate solution and excess of hydrochloric acid to 10 c.c. of the watery solution. A cherry-red color is produced by mixing with the aqueous guaiacol solution a few drops of hydrochloric acid followed by a little potassium-permanganate solution. This also becomes brownish-red on standing. Bromine-water gives a red-brown precipitate. Small crystals of guaiacol give a colorless solution with concentrated sulphuric acid in the cold, but on heating the solution becomes yellow, green, and finally red brown. In the course of the discussion on this paper Dr. Kinzel stated that he had found 1 in 60 to 1 in 70 to represent the solubility of guaiacol in water.

## Medical Notes.

**Infant Colic Mixture.**—In cases of infantile colic Professor Hare recommends the following:

Sodii bromidi.....gr. xlviii-xcvj  
Chloral.....gr. xxiv-xlvij  
Syr. lactucarii, q. s. ad.....f. iij

M. Sig.: Teaspoonful to be given on retiring.—*College and Clinical Record.*

**Beaumetz Obesity Cure.**—Dr. Dujardin Beaumetz recommends the following treatment for obesity: A hot morning bath of eau de cologne and water, followed by dry rubbing and massage. A dose of 15 grains of iodide of potassium and half a pint water after each meal. Only three meals a day and no drinking in between.

**Essence of Wintergreen in Alopecia Areata.**—H. Hallopeau reported at a recent sitting of the Paris Society of Dermatology, etc., that he had observed excellent results to follow the application of equal parts of ether and essential oil of wintergreen in alopecia areata. The results were incomparably better than those following the use of cinnamon oil.

**For Granular Eyelids.**—Dr. G. Sterling Ryerson orders, applied at night:

Hydrarg. oxid. flav.....gr. iv  
Zinci oxid.....gr. ij  
Thymol.....Mij  
Camphor.....gr. ss  
Cocain. muriat.....gr. ij  
Vaselin.....f. j

—*Therap. Gazette.*

**Anæsthetic Salve for Hemorrhoids.**—The following is given in *Medecin. Chirurg. Centralbl.*:

Cocain hydrochlor.....gr. iij  
Morphin. sulph.....gr. iiss  
Atropin. sulph.....gr. iij  
Acid. tannic.....gr. iiss  
Petrolat.....f. v

The above, which bears the appearance of a most incompatible compound, is said to be quite efficacious when applied after each evacuation of the bowels.

**Chloroform-water for Diarrhœa.**—Dantec and Bonamy are in the habit of using chloroform-water in the treatment of diarrhœa occurring in a hot climate.

Aque chloroformii, sat.,  
Aque dest., of each, 100 grammes.

To be taken at intervals during the day.

When the diarrhœa is associated with dysentery, chloroform-water is also used, but at the same time the colon is irrigated with antiseptic solution.

**Phthisis Cough Mixture.**—Dr. F. P. Henry, of Philadelphia, in the *Kansas City Medical Index*, indorses the following formula, which has been employed for many years at the Episcopal Hospital, of Philadelphia:

Potassii cyanid.....gr. j  
Morphine acetat.....gr. j  
Aceti sanguinarie.....f. j  
Syr. toluat.....f. j  
Aque.....q. s. ad. f. f. iij

M. Sig.: One teaspoonful every three hours.

The formula in regular use at Roosevelt Hospital, New York, reads thus:

Potassii cyanid.....aa. gr. j  
Morphin. sulph.....MLxxx  
Ext. pruni. virg. fld.....q. s. ad. f. f. iij  
Syrup.....f. j

**Y-dzi or bobo seed**, which, when stripped of their husks, and either parched or in a soup, are used as

food in Annam, Cochin-China and Tonquin, very much resemble the seed of *Coix gigantea*, Roxb. The seeds are used by travelers in the same manner as tea to purify unwholesome water, and are said to have a beneficial effect.

**Burns.**—The following useful combinations are given by Saalfeld:

Tannic acid.....3 ss  
Alcohol.....f. 3 iij  
Collodion.....f. 3 v  
Tr. benzoin.....f. 3 ss

Paint upon the surface.

Alum.....3 j  
Yolk of egg (boiled).....No. j  
Glycerin.....f. 3 ss

Or—

Alum.....aa. 3 ss  
Borax.....f. 3 iij  
Rose water.....f. 3 v  
Tr. benzoin.....f. 3 iij

Sig.—Apply upon compresses.

**The Diagnosis of Diphtheria.**—The Health Department of the City of New York is making use of bacterial cultures for diagnosis in all cases of suspected diphtheria, and is desirous of introducing the practice to the notice of physicians. The department recommends physicians to either make the inoculations themselves or authorize an inspector to make them, and states that the inoculations should be made in every suspicious case at the earliest possible moment, as, owing to the fact that the specific organisms often disappear from the throat during convalescence, the full benefit of a positive diagnosis cannot otherwise be obtained. The inoculations are made by gently rubbing a cotton swab against the throat, and then drawing it over the surface of the culture medium. When the physician desires to make the culture himself (and this is usually the better plan, for it can be done earlier and is more agreeable to the family), he can obtain, free of cost, a culture tube and swab and the simple directions necessary for their use at any of the druggists whose addresses are given below. After the inoculation the tubes are to be returned at once from whom they were obtained. The tubes will be collected by the department every evening. If, on the other hand, the physician desires an inspector to make the inoculation, he is requested to state this when the notification of the case is sent to the department.

The culture tubes and swabs can be obtained of the following pharmacists: T. E. Fraser, 1024 Second avenue; T. A. Spear, 125th street and Eighth avenue; C. W. Dorn, 680 and 740 Columbus avenue; L. P. Rupp, 468 Ninth avenue; C. A. Proben, Twelfth street and Second avenue; C. A. Marsh, 47 East 125th street; H. M. Barnes, 110th street and Madison avenue; P. Hoykendorf, 817 Third avenue; F. W. Schoonmaker, 19 East 42d street; Fraser & Co., 262 Fifth avenue; C. O. Bigelow, 102 Sixth avenue.

AGARIC IN FETID SWEATING OF THE FEET.

(B. LANG.—*Med. Week.*)

PAINT.

Agaric extract.....0.5-1 gramme [7½-15 grains.]  
Alcohol......50 grammes [s. fl. ounces.]

Use externally.

## Educational.

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We present below the concluding portion of the series of articles on the colleges of pharmacy of the United States. No other pharmaceutical publication has ever given so comprehensive a survey of the field of pharmaceutical education in this country, though the utility of such a series to prospective students of pharmacy has been freely admitted and its advantages both to colleges and their students always acknowledged with an appreciation sufficient to recompense us for the time and trouble taken.

**Cleveland School of Pharmacy.**—Cincinnati organized the first pharmaceutical instruction in the State of Ohio, but in 1882 Cleveland druggists, in order to foster the desires of their clerks to secure better knowledge of pharmacy, established a school which was at once appreciated by the young men, and ever since has been a growing and valued instructor in pharmacy. In its past it has conferred certificates of proficiency, and its holders have been found to be persons of excellent ability as pharmacists. Its faculty are Joseph Feil, chemistry and physics; Henry W. Stecher, theoretical and practical pharmacy and botany, and William Kuder, materia medica. The Cleveland Pharmaceutical Association is an excellent organization, and they are the power behind this school of pharmacy, giving it able assistance by sending students as well as aiding pecuniarily, and it is to the committee of the association in especial that credit is due for the good work done. This committee consists of E. A. Schellentrager, E. B. Lane, G. L. Hechler, Geo. W. Voss and J. H. Peck. The entire two years' course will be an expenditure of \$52. The hours of lectures are in the afternoon. The school has no laboratories of its own, but otherwise has an excellent outfit for lecture use and demonstration. The lecture course begins in the latter part of September, and two afternoons are given each week to each class, the course of the juniors and seniors being 80 lectures to each class. The excellence of this course of instruction is appreciated by the Cincinnati and Buffalo Colleges of Pharmacy. Holders of certificates of this school are admitted to the senior course without examination and to the two who stand highest the prize of a full senior course is offered by these colleges. For prospectus address Cleveland School of Pharmacy, Cleveland, Ohio.

**University of Wisconsin, Department of Pharmacy,** is located in the beautiful city of Madison, and was organized in 1883, F. B. Power being appointed to take charge of its interests. When he resigned, E. Kremers, formerly his efficient aid, was appointed to its management. The curriculum requires an entrance examination, and the studies of the junior year are inorganic chemistry, qualitative and quantitative analytical work; organic chemistry, biology, botany, hygiene, pharmaceutical and chemical operations. For the senior year pharmaceutical chemistry, applied chemical analysis, botany, pharmacognosy, mineralogy and geology, as well as some allied instruction of the University proper. The expenses for the two sessions are about \$75 for non-residents for the State, but less for residents. To graduate, a thesis, an herbarium collection, four years' experience and satisfactory examinations are required. The degree of Ph.

M. is conferred for an extra study of one year and extra examinations. The faculty include E. Kremers, materia medica, pharmacy and pharmaceutical chemistry; C. R. Barnes, botany; W. W. Daniells, chemistry; H. W. Hillyer, organic chemistry; W. H. Hobbs, mineralogy and metallurgy, with a corps of assistants as instructors. For prospectus address Department of Pharmacy, University of Wisconsin, Madison, Wis.

**The Brooklyn College of Pharmacy,** now about to enter its third year's work, began as the Brooklyn School of Pharmacy seven years ago. It received its charter from the Legislature of the State of New York on April 21, 1886, but granted no degrees until 1892. The officers of Kings County Pharmaceutical Society are its officers. Albert H. Brundage, M.D., Ph.G., is the present president.

The faculty is as follows: Elias H. Bartley, dean and professor of organic chemistry; Henry W. Schimpf, professor of inorganic chemistry; Joseph H. Hunt, B.S., M.D., professor of materia medica and botany; William C. Anderson, professor of theory and practice of pharmacy; Daniel C. Mangan, instructor in organic and inorganic chemistry; Smith Ely Jelliffe, M.D., instructor in materia medica and botany; John F. Golding, instructor in theory and practice of pharmacy; Henry E. Brundage, LL.B., lecturer on pharmacy laws; George D. Hulst, Ph.D., lecturer on botany for session 1892-93.

The expense for two years for instruction, fees, etc., is about \$120. Believing that two years is too short a time to teach pharmacy as thoroughly as it should be taught, this institution does not attempt the task of making chemists, botanists, physiologists or microscopists of its students in so brief a time. It is content with giving a thorough training in knowledge necessary in compounding prescriptions, identifying drugs and making preparations that can be prepared economically in the drug store, as that time will permit. The next session will begin October 2. For prospectus address Chas. E. Knebel, clerk of the college, 399 Classon avenue, Brooklyn.

**Northern Indiana Normal School, Department of Pharmacy,** at Valparaiso, Ind., will open its next course Sept. 5. The course in this department embraces the consideration of pharmacy, theoretical, practical, operative and extemporaneous, inorganic, organic and analytical chemistry, pharmacognosy (organic materia medica), botany, microscopy, urinalysis, physiology, therapeutics, toxicology, zoölogy, geology, mineralogy, Latin and jurisprudence. The instruction in these branches is given in one year or 5 terms of 10 weeks each. The advantages this school claims are: Inexpensiveness of tuition, reduced cost of living; there are no forms of amusement or dissipation such as there are in a large city to detract students from consistent and regular study; the instruction is carried on without intermission, all classes reciting daily; the instruction is conducted on the "normal" plan, which has decided advantages over the "lecture" system, each student being called upon to recite; the progress of the student, while rapid and systematic, is not undertaken at the expense of comprehension, each advance in the course being

preceded by a thorough drill in the subjects previously taught; the instruction, while embracing the same topics as taught in any college of pharmacy, is practically an elaboration of the pharmaceutical college course, great stress being placed on practical laboratory instruction, and the student is required to take several studies not taught in a college of pharmacy, but which actually have a bearing, more or less direct, upon the successful practice of pharmacy, commercial and technical; the course is continuous throughout the year, enabling students to enter at any time and pursue their studies from the beginning of the junior term to the conclusion of the senior term without delay or hindrance; the student is privileged to attend any of the other departments of the school without extra expense. The faculty are: J. Newton, Roe, pharmacy and materia medica, and in charge of pharmaceutical and microscopic laboratories; H. M. Evans, physics, chemistry, physiology, and in charge of chemical laboratory; H. V. Hibbard, botany, zoölogy, geology and mineralogy; H. N. Carver, Latin. The expense is \$43 for the entire course.

Owing to the high grade of the course and the time required to complete the work, the attendance has been small. Four years' experience is required to obtain the degree of graduate of pharmacy.

For information, address H. B. Brown, president of Northern Indiana College of Pharmacy, Valparaiso, Ind.

**Louisville School of Pharmacy** is for women exclusively. Its lecture rooms are located at Fifth and Yale streets. The sessions continue 20 weeks during the months of October to April. Students must pass a preliminary examination if not graduates of some literary school. Certificates of proficiency are given to those who have attended two sessions, had three years' experience and passed a satisfactory examination, and by one year's more attendance and laboratory work the title of Ph.G. is conferred. Lecture fees for the three years are about \$100. The faculty are J. P. Barnum, analytical and pharmaceutical chemistry; Wiley Rogers, pharmacy; W. P. Overstreet, chemistry; T. H. Stuckey, materia medica and botany; Chas. Mayer, assistant to professor in pharmacy. In addition to the regular lectures Dr. J. W. Fowler, president of the State Board of Pharmacy, will give ten lectures on practical subjects during the next session, as will also E. W. Consendine, Edward Pfingst and other practical pharmacists. For prospectus address Dr. Wiley Rogers, dean, Louisville, Ky.

**New Jersey College of Pharmacy.**—The first Winter course of this college has just come to a close. A special Summer course in practical chemistry is now open for students,—analysis in all its branches (water analysis, analysis of foods, drugs, commercial articles, etc., acidimetry and alkalimetry, etc., etc.) being taught. During the past Winter a number of regular pharmaceutical students attended the regular lectures and the obligatory laboratory course in chemistry.

The special elective courses in analytical chemistry were also well attended. The laboratory is under the immediate supervision of Prof. A. B. Drescher. The next regular Winter course will open early in October, 1893, and in addition to the lectures in pharmacy, chemistry, physics, materia medica, botany, physiology and the laboratory instruction in chemistry and practical pharmacy, there will be organized in the early Spring of 1894 a field class in botany, which, under the guidance of a professor, will make regular excursions into the country for gathering and studying of living plants. Full particulars will be found in the prospectus of the college, which will soon be ready and can be

obtained by addressing the secretary, Frank B. Meeker, 291 Central avenue, Newark, N. J.

**Richmond College of Pharmacy.**—Under the leadership of Hunter McGuire, P. H. Mayo, Thomas Alkinson and other prominent citizens of Richmond a medical university has been founded in that city with Dr. Hunter McGuire, chairman of the faculty. A dental school and a pharmacy school are embraced in the College of Physicians and Surgeons, as the university is called, each of the schools having a practical autonomy. T. Ashby Miller, a graduate of the Philadelphia College of Pharmacy and the proprietor of a successful pharmacy on Broad street, has been chosen chairman of the pharmaceutical faculty and professor of pharmacy; T. Webber, chief professor of chemistry, and Andrew T. Snelling, professor of materia medica and botany. The school is located on West Broadway, opposite the Lee monument. A common English education equal to that given in the public high schools will be required for entrance, and for graduation with the degree of Ph. G. the student is required to be 21 years of age, to have had four years' practical experience, two years at college and to pass the examinations prescribed. The lectures, etc., will occupy the time from 7.30 to 10.30 P.M., three times per week, beginning October 3, 1893, and continuing till April 1, 1894. The total expense for the two years, including graduation fee, will be \$135.

For further information address T. Ashby Miller, dean, Fifth and Broad streets, Richmond, Va.

**Dallas College of Pharmacy** is talked of and may be a fact before very long. A charter has been granted for its organization, and one of its promotors advises us that they may be in a position to give lectures this coming Winter session. It will follow the plan of the Brooklyn college in every particular. For information address L. Myers Connor, secretary, Dallas, Texas.

**Texas University** has a land endowment which is one of the largest if not the largest of any State university. Through the efforts of George Katleyer, of San Antonio, and other members of the Texas Pharmaceutical Association, the regents of the university have determined to establish a department of pharmacy. The selection of a professor is to be made at the September meeting of the Board of Regents in Austin. No details as to the curriculum have yet been settled.

This, we believe, closes the list of organized bodies as pharmaceutical educators. There is room for them all to have much larger attendance this season if both employers and employes realized the benefit that both would receive from their patronage.

#### ♦♦♦♦♦ The Condition and Future of Pharmacy in Switzerland.

In Switzerland there are not the governmental restrictions which regulate the number of stores per thousand of population as in Germany though there are many who advocate the establishment of some such restriction. The following review of the situation is based upon an article which appeared in the *Schweizerischen Wochenschrift für Chemie und Pharmacie*, the official organ of the Swiss apothecaries' society.

The strongest argument which the supporters of the *statu quo* advance is that the number of pharmacies will regulate itself under the pressure of competition just as is the case in other mercantile pursuits. These forget, however, that pharmacy cannot be compared with other mercantile callings since a merchant in any other line, when too hardly pressed by competi-

tion, can obtain relief by purchasing goods of lower quality, a license which the pharmacist cannot exercise.

On the one hand the pharmacist is considered simply as a merchant, while on the other he is subjected to stringent regulations imposed in the interest of the public safety.

Some look upon the pharmacy as a kind of bazaar in which all articles for household use should be kept; the larger number, however, consider that it should remain the place where medicines are compounded and dispensed. From this latter standpoint the increase of pharmacies is dangerous to the public. The pharmacist, failing to find a sufficient income within the lines of his calling, will be forced to take up side lines which will lead him away from his proper field of duties.

The convenience of the public is no doubt served by having a larger number of stores, and from this point of view thanks to the competition and thanks to the increasing number of stores, Swiss pharmacy has prospered so far; it has made great progress within a short period, but at the same time it must be conceded that there is a maximum above which the multiplication of pharmacies becomes retrogression, since either the public or the pharmacist, or both, must suffer from it. To establish this maximum is very difficult and it can only be done hypothetically.

The proportion established in Germany of 10,000 inhabitants to one pharmacy is much too high and a reduction to 8,000 to one is spoken of there. If the proportion established in Germany be introduced in Switzerland then many pharmacies in the smaller towns and rural districts must be closed up. Such a step is, however, not in the interest of the public welfare.

If one would establish a definite proportion it must be sufficiently low to allow of the existence of drug stores in remote sections. Furthermore it is not in consonance with the democratic ideas of the Swiss to enrich the fortunate possessor of a pharmacy, while another who has qualified himself for it is forbidden to establish himself.

The solution of this question is intimately interwoven with the question, What is the minimum of business necessary to support a pharmacist with one assistant? An annual business of 20,000 francs is considered as a minimum amount of business which will avail for this purpose whether for the city or the country. It is true that very many pharmacies in larger cities, and even more so in the country, are forced to be contented with a smaller turn over.

In the *Société industrielle de secours mutuels pour hommes* and in the *Société mutuels pour femmes*, the average amount paid to pharmacists for medicines per member is 4.85 francs per annum for men and 4.70 francs per annum for women. Taking this amount per capita as a basis, for calculation, Lausanne with its population of 34,128 would yield a prescription business amounting to 126,790 francs, a sum sufficient to support only 16 pharmacies. Applying the same proportion, the four largest cities of French Switzerland, namely Geneva, Lausanne, Neuchatel and Freiburg, with an aggregate population of 135,693, would yield a prescription business of 647,255 francs per annum, sufficient to support 64 pharmacies, whereas there are 74 in the four cities named. This leaves a deficit of 100,000 francs worth of prescription business per annum which must be made up by the trade from adjacent rural districts and from travelers. In point of fact, however, the rural districts are amply supplied with pharmacists, while it is much less customary for the country physician to write prescriptions than for his city confrère. All these facts taken into consideration justify one in accepting the above figures as fair for the section named.

They are not, however, applicable to the German cantons, where allowance would have to be made for the large amount of dispensing done by the physician himself. Available statistics failing for this latter section, the German cantons will not be considered. Taking the figures given above it will be seen that in the four French cantons the maximum of pharmacies should be 1 to each 2,120 inhabitants instead of 1 to 1,833 as at present. In large cities, where dispensing is wholly in the hands of the pharmacist, this should really be not more than 1 to 2,500.

Taking the whole of Switzerland this maximum ratio is not yet reached, but it is not far off, as in the rural districts there are constant accessions to the ranks of pharmacy, while the dispensing of their own medicines by doctors there renders the pharmacist almost a superfluity.

While pharmacy cannot be said to be in a bad condition it displays no tendency toward improvement. The question presents itself what shall be done so that if the condition of pharmacy be not improved it shall at least not grow worse?

To this question there have been various answers, Bader, the former editor of *Schweizerische Wochenschrift*, proposed a governmental monopoly, but this proposition met with but little support and it would probably not meet with favor from the public, for the Swiss people do not like monopolies. The government might do something by amending and enforcing the regulations concerning the practice of physicians, but in reality the pharmacists of Switzerland must depend for protection upon united effort among themselves.

#### New Process for Iron Albuminate.

The following process is said (*Correspond. Blatt. für Schweiz. Aertste*, 1893, 13,) to produce an albuminate which is readily absorbable and which does not give the iron reaction with the ordinary reagents: Agitate white of eggs with an equal volume of water and add a marked excess of potash solution, when the albumen will in a few minutes turn into a yellowish jelly-like mass. Wash this with water to remove the excess of potash solution and warm on a water bath for from 4 to 5 hours when a clear solution will result. Filter this, dilute with water and add diluted acetic acid which will cause the formation of a fine precipitate which will soon settle to the bottom. Wash this precipitate carefully, dissolve in ammonia and add a carefully neutralized solution of iron tartrate so that for the albumen of 25 eggs 1 gramme [15 grains] of iron tartrate is used.

Keep the red colored liquid at the boiling temperature for half an hour and then filter. Cool and precipitate the new iron albuminate with diluted acetic acid, dissolve in ammonia and again precipitate with acetic acid, repeating the operation until the substance is freed from the last traces of iron oxide. Then dry over sulphuric acid.

This substance forms a flocculent yellowish powder which dissolves readily and completely in dilute solutions of ammonia, soda or potassium carbonate without decomposition. From these alkaline solutions it is precipitate by diluted acetic acid, the precipitate being soluble in an excess of the acid. Acids generally, and mineral acids in particular, easily decompose the substance. Nevertheless no iron can be extracted by means of an alcoholic solution of hydrochloric acid, a point of difference from the ordinary iron albuminates.

## Notes, Queries, and Answers.

*We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.*

*When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.*

**Valuation of Carbolic Acid.** J. H. C., Boston.—We cannot do better in this instance than refer you to the process described on page 10 of the new pharmacopœia. The method there set forth has the stamp of authority and represents the best test known to chemists.

**Albert's Rheumatic Remedy.** A. F., New York.—This is one of the numerous combinations of potassium iodide, sodium salicylate and wine of colchicum, intended for the cure of rheumatism. We append a formula which is followed in the hospital where the mixture originated:

|                                |      |
|--------------------------------|------|
| Potassium iodide.....          | 3 ij |
| Sodium salicylate.....         | 3 iv |
| Potassium acetate.....         | 3 iv |
| Glycerin.....                  | ss   |
| Wine of colchicum.....         | 3 ij |
| Water, sufficient to make..... | 3 iv |

The proportion of water is sometimes increased when the dose is, of course, correspondingly larger.

**Piso's Consumption Cure.** A. H. B., Baltimore.—The following is said to produce a preparation closely resembling the original:

|                                       |           |
|---------------------------------------|-----------|
| Tincture of tolu.....                 | ½ ounce   |
| Fluid extract of lobelia.....         | 2 drachms |
| Fluid extract of Indian cannabis..... | 2 drachms |
| Chloroform.....                       | 1 drachm  |
| Morphine sulphate.....                | 4 grains  |
| Tartar emetic.....                    | 4 grains  |
| Essence of spearmint.....             | 10 drops  |
| Water.....                            | 8 ounces  |
| Sugar.....                            | 14 ounces |

Mix the fluid extracts, tincture of tolu, chloroform and essence of spearmint and to this add the sugar. Dissolve the morphine and tartar emetic in hot water, then add with the remainder of the water to the other ingredients contained in a large bottle. Shake and allow to stand before decanting.

**Fowler's Solution and Dialysed Iron.** R. S. L., New York City.—This correspondent is frequently called upon to prepare a mixture composed as follows:

|                           |          |
|---------------------------|----------|
| Liq. potass. arsenit..... | ℥. 3 ii  |
| Liq. ferri dialysat.....  | ℥. 3 iii |
| Aque ad.....              | ℥. 3 iv  |

He wishes to know if the above can be prepared as a clear solution.

The precipitation in this mixture is due to the formation of hydrated oxide of iron produced from the alkali carbonate in the Fowler's solution, which cannot be avoided without interfering with the character of the compound. Although a type of an incompatible mixture, physicians who make a specialty of the treatment of diseases of the nervous system, by whom it is much used, claim they get better results from this combination than with mixtures of the tincture of chloride of iron and solution of arsenic chloride.

An arsenical salt solution free from alkalies will not produce the precipitation complained of.

**Fireproofing Fluid.** J. C. E., Brattleboro, Vt.—A patent has been granted in France for a fireproofing fluid of the composition given below. The formula is that given in the official description: Take 40 gm. boric acid, 30 gm. sulphate of aluminum, 17 gm. tragacanth, and 9 gm. silicate of potassium, and dissolve them in 450 gm. of water at 90° C. Make another

solution composed of 30 gm. nitrate of sodium, 7 gm. ammonium borate, 17 gm. ammonium phosphate, and 400 gm. of water. Mix the two solutions, let stand until precipitation has subsided, and decant the clear liquid. The article to be fireproofed is placed in this liquid and left for forty or forty-five minutes at a temperature of 35° C.

**Brilliantine.** J. E. W., West Chester.—A number of different formulas are extant for this preparation, but all have some points of resemblance, castor oil being the base accepted generally for each. The following are types:

I.

Castor oil 6, castile soap 2, benzoin 2, alcohol 200 gm., attar of roses or of neroli sufficient.

II.

Glycerin 10, alcohol 100, rose water 100 gm.

III.

Castor oil 6, glycerin 6, benzoin 2, alcohol 200 gm. and sufficient of any choice odor to perfume.

**Copying Pad.** C. & Co., Richmond.—This correspondent has failed to get satisfactory results from the different formulas tried so far for the manufacture of hektograph composition and requests a formula which will be likely to give good practical results.

The trouble with many of the formulas given for hektograph composition is that sufficient allowance is not always made for differences in climate. Thus a composition which may be found to work nicely in northern latitudes will be almost useless in warm climates. The right proportions of glycerin and gelatin for the composition of a pad is found best by practical experiment. We reproduce below a formula which has given excellent results in the hands of one of our New York subscribers. For use in the South less glycerin should be used:

|               |              |
|---------------|--------------|
| Gelatin.....  | 50 grammes   |
| Glycerin..... | 350 grammes  |
| Water.....    | 350 cubic cg |

Soak the gelatin in water over night; pour off any excess of water. Warm the hydrated gelatin and add the glycerin, stirring constantly. Pour the melted mixture in a shallow pan and allow to cool. Less glycerin should be used in warm weather.

**Estimation of Oil in Emulsions.** J. C. E., Phila., PA.—The simplest method of estimating the amounts of oils or fats which may be contained in emulsions or ointments is that of the Brooklyn College of Pharmacy, which is conducted as follows:

Fit a test tube with two good corks, one of which is provided with a wash-bottle apparatus; then introduce into a test-tube half filled with ether a weighed quantity of the emulsion (2 to 5 grms.) or ointment (1 to 2 grms.); the tube is then stoppered and shaken for 5 minutes, the mixture allowed to separate, and the upper ether layer drawn off into a tared vessel by gently blowing through the wash-bottle arrangement. This process is repeated until the oil or fat is all extracted, as shown by a few drops of the last portion drawn off leaving no residue on evaporation on a watch glass. The ether is now evaporated off and the vessel containing the oil is dried in a water oven and weighed. By deducting the weight of the vessel from the above weight, the weight of the fat or oil is obtained, and the percentage easily calculated.

The apparatus shown under "Novelties and New Inventions," which is a modification of the Hulsebosch apparatus, may also be used for the purpose of estimating fats being commended for this purpose by Professor Gunning, of the University of Amsterdam.

**Gilding on China.**—G. G. M., Ridgeway, Pa., requests a formula for making a gold compound for use in china painting.

The compound ordinarily used for gilding china is made by dissolving 1 dram of metallic gold or gold chloride in about 6 drachms of nitro-hydrochloric acid and adding to this 6 grains of metallic tin with sufficient nitro-hydrochloric acid to dissolve the tin. This is afterward poured into a mixture of 30 grains of balsam of sulphur and 20 minims of oil of turpentine. As the mixture stiffens 30 minims more of turpentine are added, and the mixture stirred until ready for use. Balsam of sulphur is made by boiling together in a covered vessel 1 part of flowers of sulphur and 4 parts of oil until the mass thickens.

**Compound Tincture of Cudbear.** A. J. W., N. Y.—This tincture is semi-official in the National Formulary, and is made as follows:

|              |                                      |
|--------------|--------------------------------------|
| Cudbear..... | 120 grains                           |
| Caramel..... | 1½ troy ounces                       |
| Alcohol, {   | each enough to make 16 fluid ounces. |
| Water, }     |                                      |

Mix one volume of alcohol with two volumes of water. Macerate the cudbear with twelve fluid ounces of the menstruum during twelve hours, agitating occasionally, and then filter through paper, and add the caramel, previously dissolved in two fluid ounces of water. Then pass enough of the before mentioned menstruum through the filter to make sixteen fluid ounces.

**Coloring Matter in Rubifoam.** M. J. B., N. Y.—The coloring matter in rubifoam is derived in part from the pellitory, red saunders and soap bark which are said to be employed in its composition. It is probable that cochineal also figures as a component ingredient, but this is doubtful. Red saunders is much used for imparting a reddish color to hydro-alcoholic liquids.

**Cucumber Cream.** H. F. R., Pa.—We have published several formulas for the preparation of cucumber cream as reference to back numbers will demonstrate. The following is a recently devised recipe which is said to produce a satisfactory cream:

|                          |                      |
|--------------------------|----------------------|
| Cucumber juice.....      | 1 pound              |
| White wax, {             | of each..... 1 ounce |
| Spermaceti, }            |                      |
| Essence of cucumber..... | 2 ounces             |
| Almond oil.....          | 1 pound              |

Melt the wax, oil and spermaceti together with a gentle heat, and when nearly cool add the essence and juice of cucumber and stir briskly until the whole assumes a creamy consistency.

**Silver Polish.** J. K. C., Sheffield, Pa.—A polishing paste for silver, of the kind described in your note, may be made by mixing nitrate of silver with common salt and cream of tartar, in the following proportions:

|                      |          |
|----------------------|----------|
| Silver nitrate.....  | 2 parts  |
| Sodium chloride..... | 2 parts  |
| Cream tartar.....    | 14 parts |

The solids are reduced to a very fine powder and mixed with sufficient water to form a paste of the desired consistency. The operation of mixing must be conducted in the dark.

**Strength of Belladonna Extracts.**—B. G. wishes to know how much fluid extract of belladonna is equivalent to 1 gramme of alcoholic extract of belladonna.

Five grammes of the former are approximately equivalent to one gramme of the latter. The same correspondent desires to know through what chemical process "the presence of roof color in red house color made of lead and Indian red can be proved." He also requests "a formula for cold cream equal substantially in cold Winter as hot Summer." Will some

of our numerous readers be good enough to attend to this correspondent's wants, through the medium of this page?

**Potassium Bromide and Strychnine Sulph.**—M. Cassia, Red Wing, Minn., sends the following copy of a prescription handed to him recently:

|                       |        |
|-----------------------|--------|
| Strychnin. sulph..... | gr. j  |
| Potass. bromid.....   | 3 ss   |
| Aque.....             | d. ʒiv |

M. ft. sol.

Sig. 3 j ter in die.

He informs us that he noticed a precipitation take place shortly after solution was effected, which led him to communicate with the physician before taking the responsibility of dispensing the prescription. The physician on being consulted said "It's all right, I'll take the responsibility" and pooh-hood the idea of danger. "M. C." finally refused to dispense the prescription and thereby lost the patronage of the physician. He wishes to know whether he was justified in acting as he did.

Notwithstanding the well known physiological and chemical incompatibilities of strychnine and bromides of the alkalies, they are still prescribed in combination, and it is surprising that no accidents happen from their unguarded use. "M. C." was, however, not quite within the right in refusing to dispense the prescription as written, since by a little manipulation he could have succeeded in re-dissolving the precipitate of hydrobromide of strychnine formed by reaction between the two salts prescribed. The addition of about 4 fluid drachms of alcohol would have produced a clear solution, and if "M. C." had wished to be very cautious and careful to avoid accident he might in addition have attached a "shake" label to the bottle and felt perfectly safe in allowing the mixture to leave his store. A great many of the misunderstandings between pharmacists and physicians might be avoided by the exercise of a little tact and diplomacy, and "M. C." should have been able to explain to the physician why the precipitation occurred and how it could be remedied.

## Bibliography.

**DIE TECHNIK DER VERBANDSTOFF-FABRICATION.\***—Ein Handbuch der Herstellung und Fabrikation der Verbandstoffe, sowie der Antiseptica und Disinfections mittel auf neuester wissenschaftlicher Grundlage für Aerzte, Apotheker, Techniker, Industrielle und Fabrikanten. Mit 17 Abbildungen von Dr. Theodor Koller. Wien Pest, und Leipzig, A. Hartleben's Verlag 1893.

Germany's technical literature leads that of the world, and probably no single collection of technical works in that or any other language contains a larger number of practically valuable contributions than does the "Chemisch-technische Bibliothek" of Hartleben, of which the book before us forms the two hundred and seventh volume.

The book is divided into four parts, the first being taken up with surgical dressings (verbandstoffe) and their manufacture, the second with antiseptics, the third with disinfection and disinfectants, while the fourth part is devoted to a consideration of the various methods best adapted for the examination and valuation of antiseptics, disinfectants and surgical dressings.

In view of the marvelous progress in operative surgery, which followed the introduction of antiseptics, the means which have rendered such progress a possibility

\*The Technique of the Manufacture of Surgical Dressings. A handbook of the preparation and manufacture of Dressings, Antiseptics, Disinfectants, etc.

are well worthy careful study from the technical side; and the gathering together in orderly manner of the data relating to this subject which is scattered throughout periodical pharmaceutical literature, as has been well done in the volume before us, is in itself a praise-worthy task.

The combination of practical and scientific knowledge which Dr. Koller brings to bear on the subject, however, elevates the book above the ranks of a new compilation and renders it a well digested, practical and useful handbook.

**ALABAMA PHARMACEUTICAL ASSOCIATION.**—Proceedings, 1893.

To the Alabama Pharmaceutical Association belongs the credit of having issued the printed minutes of its annual meeting sooner after the close of the same than has probably been accomplished by any similar organization. The publication is a neat one, too, and reflects credit upon all who have assisted in its preparation. Besides the report of the meeting proper it contains an appendix consisting of the papers and addresses read before the meeting and a full copy of the law regulating the practice of pharmacy in Alabama. Members of the association who have been overlooked in the distribution of copies of this report of the proceedings for 1893, should write to the secretary, P. C. Candidus, Mobile.

**PROCEEDINGS OF THE TENNESSEE STATE DRUGGISTS' ASSOCIATION**, also the pharmacy law, constitution and by-laws and roll of members.

The volume of proceedings of the Tennessee State Druggists' Association for 1893 consists of fifty pages of matter embracing an account of the annual meeting with the different addresses reported verbatim together with a page or two of editorial comment and the Pharmacy Act of the State. It also contains the constitution and by-laws of the association and a list of members. The different papers which were read before the association are printed in full, and form interesting reading. Extra copies may be obtained from the secretary, Will Vickers, Murfreesboro, Tenn.

**PROSPECTUS OF THE COLLEGE OF THE CITY OF NEW YORK.** Session 1893-1894.

The opening pages of the prospectus for 1893-4 are taken up with diagrams illustrating the plan of the new building. From a cursory inspection of these, it is evident that the new college building will represent the very acme of progress from either the viewpoint of artist, architect or pharmacist. The building is to be six stories high, fireproof throughout, and it is claimed will be the only building in the world constructed for the education of pharmacists exclusively. We also gather that the new building will accommodate 1,000 students with perfect comfort, while the laboratories are fitted up for 150 students working simultaneously—a feature of great importance.

The remainder of the prospectus is taken up with the syllabus of lectures, which in itself is a feature of much value to students. Mention is made of the facilities possessed by the college for obtaining situations for students attending the college. The system now in vogue for this purpose was adopted about a year ago and met with so much success that it was deemed advisable to appoint a permanent committee. W. H. Ebbitt, a most indefatigable worker in college affairs and widely known throughout New York City, is chairman of this committee and the plan should be operated with increased success, if anything, during the ensuing sessions.

**ONTARIO COLLEGE OF PHARMACY.**—Annual announcement, 14th session, 1893-'94, St. James' square, Gerrard street, Toronto.

This is one of the neatest and most attractive announcements which come to our table. It contains a number of illustrations in half-tone of the different laboratories and lecture rooms, with full descriptions of the scope of the senior and junior courses and of syllabuses of the lectures. It also contains a résumé of the regulations pertaining to the apprenticeship of students and a history and description of the college. The pharmacists of Canada are to be congratulated on the excellent school of pharmacy which they possess in the Ontario College, and we hope that they will do their part toward making it the successful institution of learning it deserves to be.

## Novelties and New Inventions.

Under this heading we will be pleased to insert, free of charge, a description and illustration of novelties and new inventions of interest to the drug trade.

### Hoare's Patent Test Tube.

The accompanying illustration shows the design of a test tube for which U. S. letters patent were issued to Edward S. Hoare, of Forest Hill, England, who is connected with Guy's Hospital, London.

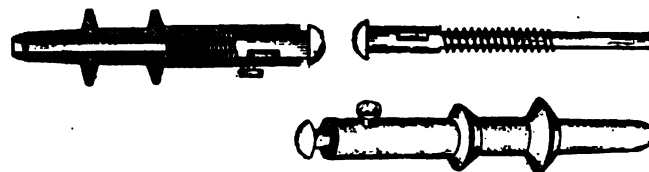


The advantages of this test tube are: 1st. The risk of liquids boiling over is reduced to a minimum, the bubbles bursting on reaching the bulb. 2d. It may be laid down on any flat surface, without the contents spilling, when not more than about half full, this being the maximum extent to which they are usually filled. 3d. In using a rack they are simply inverted in the holes, the bulb resting on the rim; the necessity of pegs being thus obviated, while complete drainage is obtained, and freedom from contamination insured.

The tubes may be had of A. Gallenkamp & Co., 2, 4 and 6 Cross street, Finsbury, London, England, of Evans, Lescher & Webb, Liverpool and Montreal, and English wholesale druggists generally.

### New Tablet Triturate Mold.

We illustrate herewith a new device for making tablet triturates in small quantities. It has been placed on the market by the American Triturate Mold Co., 1130 South Twelfth street, Philadelphia, who are



also the manufacturers and patentees. The mechanism of the mold is very simple, consisting of a piston-like arrangement working in a cylinder of hard rubber, and so regulated by a spring as to be stationary at a point a short distance removed from the open end of the device, the space being calculated to allow of the reception of a definite amount of tablet mass. The mold is furnished in two styles: One for the preparation of tablets having a large surface like compressed tablets, and the other for tablets of smaller dimensions. The makers state that as many as one thousand tablets can be made hourly by the use of the American Triturate Mold, and this number, as we are informed

by one who has seen the machine in practical operations, can be turned out thus quickly with the utmost ease.

The new mold can be obtained through any firm of wholesale druggists or direct from the makers, the American Triturate Mold Co., 1130 South Twelfth street, Philadelphia, Pa.

### On a New Blowpipe Arrangement.\*

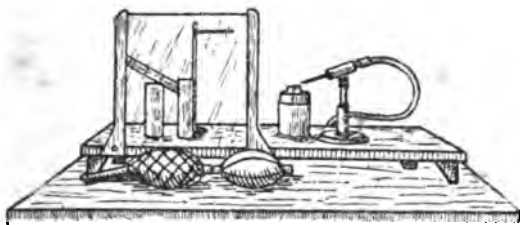
By WILLIAM M. HAMLET, F.I.C.,

Government Analyst, N. S. W.

The blowpipe, of which an outline drawing is included here, consists of the usual fine platinum jet fastened to a brass tube, jointed on to a sliding-rod inserted into a brass stand, by which means the jet may be inclined to any desired angle.

The air-blast is urged by means of one of the ordinary caoutchouc spray-producing bellows, which, in its turn, is attached to a piece of capillary lead-glass tube, over one end of which a piece of oiled silk is tightly tied, thus forming a valve that only opens inward and prevents any back-flow of air. The valve is passed through a cork and inserted into the inlet of an airtight chamber, made of tin plate, and measuring 10 inches by 8 inches by 1 inch. This air-chamber is placed out of sight by screwing on to the under side of the blowpipe-table, which measures 18 inches by 10 inches and stands on four legs  $1\frac{1}{2}$  inches high.

To the left of the front is an upright frame made to



hold a sheet of glass 6 inches square; into the groove made in the frame, ruby, violet, green or colorless glasses may be inserted as wanted. At a point 2 inches from the left edge is a brass rod 6 inches high, which serves to hold a glass tube bearing a fine platinum wire for flame-reactions.

The lamp may be any one of the many varieties of paraffin or grease lamps having a flat wick. In my own case I employ the lamp found in Fletcher's blowpipe outfit, using solid paraffin as fuel. On the extreme left, just midway across the board, is a brass plate, 2 inches by 1 inch, hard-soldered on to a universal joint (not shown in the sketch).

This forms a convenient support, when protected by a piece of asbestos millboard for charcoal pellets or cubes as well as for the plaster slabs and aluminum plates. The upright prism of porcelain is used for cupelling.

On the right is imbedded into the table a flat steel anvil and an agate mortar. Such a blowpipe becomes a valuable adjunct to the laboratory equipment, and instead of the blowpipe being despised and consigned to the drawers or box of odds and ends it finds a useful place on the working-bench. With such a piece of apparatus one can get a very clearly-defined reduction or oxidation flame, and when the jet slopes down on to the wick at the proper angle it is easy to produce a flame four inches long, and so steady that I have actually cupelled off a lead button as perfectly as it could have been done in the muffle. Such a thing is sometimes stated in books, but I never saw it accomplished until

I actually did it myself with the apparatus I now describe.

Using the flame coloration and a violet screen, it is quite possible to see the potassium flame amid the abundance of sodium salts in urine. Conversely, the presence of sodium salts in potassium compounds may be recognized by using the green-tinted screen.

Altogether it is the most efficient and the most easily handled blowpipe arrangement I know of, and I made good use of it during my visit to the Broken Hill silver-lead mines. With the steady flame obtained, Von Kobell's reaction for bismuth compounds gives most brilliant results on a slab of plaster of paris, and with dry thio-sulphate all the reactions may be instantly obtained in the dry way that are usually given in the wet way with sulphuretted hydrogen.

### Improvement in Hulsebosch's Extraction Apparatus.

Bass, of Amsterdam, presents in a recent issue of the *Pharmaceutical Weekblad* an improvement in the "perforator" invented by van Ledden Hulsebosch and illustrated in the AMERICAN DRUGGIST, *vide* Vol. xxii., No. 9, p. 180.

Prof. Gunning bears testimony to the practical value of Hulsebosch's apparatus in experiments carried out in the laboratory of Amsterdam University and also to its usefulness in milk analysis, replacing the Soxhlet apparatus. The improvements proposed by Bass (a pharmacy student at the University) are in the line of simplification and will broaden the field of usefulness of the apparatus, permitting of the use of liquids for the extraction process which are of a high boiling point.

The construction of the improved apparatus is shown in the accompanying illustration. The arrows pointing upward show the direction taken by the vapors of the solvent up to the tube *a* where, being condensed, it falls downward, pursuing the course indicated by the downward pointed arrows and passes down through the tube *b* into the flask where the solvent is heated.\*

To operate the apparatus with a heavy solvent, as chloroform, a tube is used of a slightly smaller diameter than the main vessel, with top and bottom open, the bottom opening being slightly contracted. This tube should be long enough to reach about one to two cubic centimeters above the opening of the overflow tube. Sufficient chloroform is then put into the vessel to fill the inner tube for at least a few centimeters. The liquid to be treated is then poured into the inner tube on top of the chloroform, the tube so connected with the condenser that the condensed chloroform will drip into it and thus pass downward through the liquid to be treated through the lower, open, end of the tube and up around the exterior of the tube to the overflow. This latter modification, also suggested by a student by the name of Bosman, likewise meets with the approval of Prof. Gunning in its practical operation.

\*The substratum of liquid is the liquid aqueous extract of the drug under examination which has been rendered alkaline by addition of soda solution; the upper layer is the solvent, immiscible with water, which, passing down, inside the inner tube, then upward through the water, becomes charged with the alkaloids, passes or through *b* down to a flask which is heated so as to volatilize the solvent, making it again go through the operation and leaving the extracted alkaloids in the heating flask (not shown in the illustration). For further details see AMERICAN DRUGGIST for March, page 180 and AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD for June, page 372.—EDITOR.

\*From the *Chemist and Druggist*.

*Written for the American Druggist and Pharmaceutical Record.*

## TIPS ON ADVERTISING. X.

### Window Trimming.

BY PERCY C. MAGNUS.

The subject of window trimming is one of vital importance to all retail druggists, but the attention given to it by the majority of druggists is very small, and we think that they might well in this instance pattern after their live neighbors, the dry-goods merchants, who regard their show windows as the best salesmen in the house.

So many articles have been written recently on this subject that the field has been very nearly covered, with a few exceptions, and one of these is toilet articles. When nicely displayed with well written tags attached, toilet articles can be made a source of great profit to the retailer, and there is no branch of the drug business that is susceptible of so nice a window display as perfumes, soaps, powders, etc.

In dressing a window with extracts, soaps, powders, toilet waters, etc., one of the first things to be remembered is not to have an excess of goods. The next thing is to try and bring your display as near as possible to one color. In this way you catch and hold the attention of the passerby and he can take in at a glance what you have to show.

The cut shown with this article represents a very handsome display made to represent a violet window, by a prominent firm in Brooklyn, N. Y. In looking at this engraving you can readily see that a great deal of taste has been displayed in the arrangement of the articles. It is in the power of any retail druggist to take this as a model and adapt it to his own business at a very small expense.

First procure about two dozen bunches of artificial violets, with a few yards of light violet-colored muslin, and arrange the bottom of the window with this cloth in the form of waves, so as to give a pleasing effect. In the center place a pretty jardinière filled with violets. Then fill in the sides with the violet soaps

and powders, arranging them so that they will show to the best advantage. Next, the small bottles of violet extract can be made in two pyramids, one on either side, or in the form of a star or crescent, just as one's taste may suggest. Then scatter the violets in a careless way throughout the whole display. On the sides of the frame artificial sea-grass can be hung, which is very pretty and produces an elegant background against the violet color. In this sea-grass can be pinned bunches of violets with small descriptive show

cards attached. At the top of the window hangs a fringe of this sea-grass, letting it come about half way down. It adds very much to the general effect and forms a screen to protect the goods from the light. In the center of the display may be placed a neatly written card in violet ink something like the one below, or any other design the druggist may select. A window trimmed in this style can be made to advertise and sell a large quantity of toilet goods. The display can, of course, be varied and other odors substituted, bearing in mind that everything should run to one color.

For example a "Crabapple Blossom" window may be arranged in blue, "White Roses" in white, "Peau d'Espagne" in brown, and so on through the list of odors, making a display in the inside of the store in a showcase, in or on top of the showcase, having your

price cards on each article offered for sale, so as to leave your display intact. A merchant trying a series of these window displays, perfume sales, running each odor one week, would be surprised at the expiration of a short time to see how largely he has augmented his sales.

A beautiful and striking display can be arranged as a Japanese window. First, secure a large Japanese doll, dressed in the style of the Japs, for a center figure, covering the sides and back of frame with Japanese fans and banners, placing two jardinières with Japanese figures on either side, filling them with some pretty flowers in order to carry out the effect—if possible to secure, Chinese lilies would be a very appropriate



VIOLET WINDOW DISPLAY.

flower—and working in pyramids, or on glass stands, the perfumes, soaps, toilet waters, etc. Let all of these articles bear Japanese labels to carry out the effect. A

**VIOLETS! VIOLETS!**

**NOTHING BUT VIOLETS.**

---

"A bank of violets  
Stealing and giving odor."

beautiful series of Japanese perfumes are now on the market and one would find a ready sale for novelties of this kind.

In dressing your window, you must remember in order to make a nice show you must have first-class goods to offer, then you secure permanent results by making customers.



"Violets; won't you buy my Violets?"

**VIOLET** Extract . .  
 Soap . . .  
 Powder . . .  
 Toilet Water  
 Sachet . . .

EVERYTHING IN VIOLET.

**C. F. FOSKETT & CO.,**  
 CHICAGO, ILL.

The pharmacist who wishes to get the best results from such a display must not rest here, however, but call attention to the display early and late, either through the medium of the local press or by the distribution of appropriate circulars. For use in the local newspapers an advertisement similar to that shown above might be adopted.

"Words with Wings" is the title of a neat little advertising leaflet which a Brooklyn pharmacist is distributing among his patrons. Curiously enough it contains no reference to drugs, being entirely taken up with views of a telephone exchange, showing the central exchange, the wire distributing room, a pay station and the telephone cables.

*Written for the American Druggist and Pharmaceutical Record.*

## ADVERTISING A PHARMACY.

By FRED. O. CHRISTENSEN,

Chicago, Ill.

Pharmacists can best prepare to advertise a retail store by adopting a sign or trademark—"GLOBE" for instance.

Everything in and about the store should be made to confirm with this sign—a gold globe painted on the sign over the door—a large gold globe with regulation gold mortar on top projecting in front above the outside door and a silvered glass globe in each window; round glass labels for shelf ware, a cut of the globe on all labels, most of which should be circular in form, globe stickers for patents, etc.; all proprietary goods might bear the name "Globe," and the globe idea should be used wherever practicable. The advertiser should then have some wood cuts made, of different sizes and wording, and prepared in this manner he should commence to advertise his *prescription department entirely and solely*, using one of the circular wood cuts on all occasions, always keeping the "Globe" in full sight. It would be advantageous then to pound away on the merits of his prescription department in the local newspaper (by the year, if in small town) and by circulars, local concert programmes and otherwise until the impression had been created among the people—including the doctors—that the prescription department of the "Globe" Pharmacy must be above the ordinary and consequently to their advantage to go out of their way to patronize it. This impression should then be kept up till it became a conviction.

## Advertising Sponges.

The firm of H. H. Hay & Son, Portland, Me., use the local newspapers to good advantage in advertising drugs and sundries.

The cut below is an example of a sponge advertisement, which was employed during "Sponge Week."

**1001**

Sponges in our display this week. The 1 may be just the one you want. We shall be glad to even up the count, though we sell you the one at a price quite below the ordinary.

If you are likely to need a sponge in the next few weeks, we can interest you just now.

**H. H. HAY & SON,**  
 MIDDLE STREET.

# COLUMBIAN EXPOSITION

## ANNUAL MEETING OF THE AMERICAN PHARMACEUTICAL ASSOCIATION.

The forty-first annual meeting of the American Pharmaceutical Association was opened in the Hall of Washington, at the Art Palace, Michigan avenue, Chicago, Monday, August 14. About 300 pharmacists were in attendance, this number including the principal officers and prominent members of the association and a large number of foreign visitors.

The committee of arrangements had done its work so well, in meeting its guests and providing them with suitable accommodations, that when the hour of meeting arrived, every one was in a contented frame of mind and ready to take an interested part in the proceedings. Special praise should be accorded, on this account, to the local secretary, Henry Biroth, and his energetic confrères, for their valuable services, to which is due a great part of the success which attended the opening of the Columbian meeting.

At 3 P.M., the spacious Hall of Washington, which had been reserved by the World's Congress Auxiliary for the accommodation of the A. P. A., was well filled. On the platform were the president and officers of the association and several distinguished honorary members from Europe and other quarters of the globe. It was noticed, however, with general regret, that Permanent Secretary Malsch was absent, and the news of his serious illness, which had become known to most of those in attendance, cast a gloom over the otherwise pleasant gathering.

Shortly after 3 o'clock, President Remington called the association to order, and in doing so announced that owing to the absence of Mr. Malsch, it had been found necessary to appoint a secretary pro tem. He had selected Professor Whelpley, of St. Louis, to fill that position, he having kindly volunteered to serve.

President Remington then introduced Dr. Peabody, chief of the Department of Liberal Arts of the World's Columbian Exposition, who had been chosen to make an address welcoming the association to the city of Chicago.

Dr. Peabody, who was enthusiastically received, made a long and eloquent oration, in which he outlined the general objects of the World's Fair considered from an educational point of view. He also gave, in detail, some information about the work of the World's Congress Auxiliary. Concerning the latter he said that, for months past, the halls had been filled with the representatives of many arts and sciences, whose deliberations had been recorded for the benefit of mankind. Of all these congresses none represented a higher or more useful branch of science than did pharmacy, and he therefore felt specially honored in having been selected to welcome the representatives of such an important department.

### EDGAR L. PATCH.

Edgar L. Patch, who was unanimously elected president of the American Pharmaceutical Association, at the Chicago meeting, was born in Spencer, Mass., December 2, 1851, and was educated in the public schools of Worcester. At the age of 13 he had the misfortune to lose his father. Two years



EDGAR L. PATCH,

President of the American Pharmaceutical Association, 1893-4.

after he entered the retail drug store of A. A. Burditt, Clinton, Mass., where he was employed for the next 20 months.

He then went to Boston and worked in a drug store at 135 Cambridge street. In 1870 he entered into partnership with Henry Canning, at 109 Green street, where an important and prosperous business was built up.

E. L. Patch graduated from the Massachusetts College of Pharmacy in 1872 with high rank, and the college immediately showed its appreciation of his worth by electing him a trustee, and he has been prominently identified with college affairs since that time.

In 1876 he was called to the chair of pharmacy where he served the college with marked ability until 1892, when increased business cares caused him to tender his resignation. At the dinner of the Alumni Association in May of that year he was presented with a solid silver tea set and a set of Phillips' Dispensaries, as a token of esteem and appreciation for the services he had rendered the college.

Prof. Patch has been a member of the A. P. A. since the year 1872, and he joined the M. S. P. A., in its infancy. His work and papers in connection with these organizations are too well known to need comment here. He also belongs to the Boston Druggists' Association.

Being a Chicago man, the doctor became especially eloquent when he spoke of the rise and progress of the Western metropolis. He described its educational institutions, and referred especially to those which were designed for pharmaceutical instruction. The progress of Chicago, he said, was in many respects similar to the progress of pharmacy. Both had risen from humble surroundings and were steadily climbing upward and onward.

In conclusion, Dr. Peabody said: "I am here to-day to say to you all, that Chicago welcomes you most heartily to all that she has to offer, to all the privileges, to all the enjoyments connected with the Fair, to her homes and her social life—whatever you may desire to enjoy; and I trust that when you shall return to your homes and your duties, you will return feeling that Chicago, as a host, has given to you of her abundance, and that she has given you occasion to remember her with satisfaction and delight in all your future life." (Applause.)

President Remington called on A. P. Preston, of Portsmouth, N. H., first vice president of the association, to reply to the address of welcome, on behalf of the association.

Mr. Preston, speaking for the association, cordially thanked Dr. Peabody for his eloquent words of welcome. The association, he said, had held its forty-first meeting in Chicago for three purposes—first, to bring together the greatest gathering of pharmacists that the country had ever seen; second, to enable its members to see the wonderful "White City" about which they had all heard so much; third, to enable them to see something of Western enterprise, reports of which had penetrated even into the depths of New England from whence he himself came. People from other parts of the country, Mr. Preston observed, cannot realize the effect produced upon some citizens of that region when they make their first pilgrimage to the West. After having been brought up in the idea that there could be no good outside of New England, it was an astounding revelation. Having seen the West and its great metropolis, Mr. Preston said that he felt prouder than ever before of the great country of which it forms a part. Of its people, he would say that "here they have the grandest people, the most whole-souled people that can be found anywhere, and people who are always glad to welcome their visitors. Under such auspices, the meeting of '93 could not fail to be not only a great success, but one of the most enjoyable in the annals of the association." (Applause.)

Upon the conclusion of Mr. Preston's address, Henry Biroth, the local secretary, at the request of President Remington, made a brief address of welcome, and

referred to the interesting programme that had been arranged for the entertainment of the association by the local committee.

Vice-President Watson here took the chair, and President Remington proceeded to deliver his annual address, which was listened to with rapt attention from beginning to end, being frequently interrupted with applause, especially where reference was made to the work of the committee on revision of the pharmacopœia and the progress made by American pharmacy.

In opening his address President Remington referred to the fact that for the second time in the 41 years of its existence the association met in Chicago. It was indeed interesting to contemplate both the progress made by the wonderful western city and by pharmacy since that meeting in 1869.

The great Fair and the World's Congress of Pharmacists had, he said, combined to bring together a large gathering of representative pharmacists on this occasion, and the benefits to be derived from the deliberations of the one and the contemplation of the other could not be too highly valued. It was pleasing to note that a number of foreign visitors were present, and among these were prominent officers of European pharmaceutical organizations.

It was also gratifying to see present, for the first time, delegates from the American Medical Association, whose presence added weight to the belief that is fast gaining ground in America, that the relations of the professions of medicine and pharmacy are rapidly developing toward that point which has been in times past so earnestly sought for, when both may meet on common ground and labor together for mutual advantage. Beneficial effects had followed the establishment of the section of *materia medica* by the American Medical Association, and the reception of delegates from the American Pharmaceutical Association in that section. It was to be hoped that one result of this might be the establishment of a joint body or commission for the purpose of securing needed legislation for restricting the practice of medicine and pharmacy to those only qualified to perform such responsible duties. (Applause.) If such a joint commission were founded, it would undoubtedly fall to the lot of this association to take a prominent part, as it has done, in the organization of the most important joint committee known to both professions, that of the revision of the Pharmacopœia. It must be a source of gratification to all to know that of the members of this committee of revision for the past thirty years, a majority of each committee have been pharmacists. In 1890 of the 26 members of the revision committee, sixteen were members of the A. P. A.

In this connection, the president added that, as one of the events of this year, the advent of the new pharmacopœia has just been announced, and he only voiced the sentiment of the association in tendering to the committee on revision and publication of the U. S. Pharmacopœia hearty congratulations upon the completion of their work. (Applause.) The chairman, Dr. Rice, has forwarded to the meeting for inspection the first copy of the latest revision, just issued from the press, and although the ink is scarcely dry upon its pages, a perusal of its contents will convince the reader that the committee's labors have been arduous, while those of the talented chairman have been little less than herculean. (Applause.) He was sorry to say that Dr. Rice was unavoidably absent, but had sent this copy of the pharmacopœia, which was the first one that

had seen daylight. (Applause.) Since the work will soon be sent broadcast over the land, it would be proper for some allusion to be made to its more prominent features.

In glancing through its pages, the first striking change which will be noticed is the introduction of "solids by weight" and "liquids by measure" instead of that of "parts by weight" of the former pharmacopœia, the metric system being adopted in order to express this principle in the more rational and simple manner, for in no other system of weights and measures is the commensurability of the units so easily affected; it is believed that the radical change in weights and measures will ultimately result in great benefit to pharmacy.

Upon the title-page of the new pharmacopœia will be seen the line, appearing for the first time, "Official after Jan. 1, 1894," and the issue of the book at this time will permit it to be in the hands of every pharmacist for a suitable period before it is expected to go actually into force, so that it cannot be said that the pharmaceutical profession is entirely unprepared for this radical change, which was nevertheless inevitable.

The subject of standardization has been settled in the only possible way. The unanimous conclusion has been reached by the committee that reliable estimates of assay resulting in approximately uniform results when carried out by different operators and permitting a strict identification of the products, are available at present with only a few drugs, and opium, cinchona, and nuxvomica have been selected. The introduction of assay processes, which are in the least open to question, strikes at the authority of authority and destroys the usefulness of the standard.

The revision tests and definitions of the chemicals has been thorough and laborious. Volumetric methods supplant former gravimetric ones wherever possible, thus rendering analysis by the pharmacist more correct, by reducing the examinations of medicinal chemicals to the simplest and most rapid methods consistent with accuracy.

Referring to the matter of nomenclature, the attempts of the revision committee have been very successful in this direction, and the result of their work will be generally approved. On the other hand, the arguments of those who seek to phoneticize pharmaceutical and chemical terms, as, for instance, by substituting "f" for "ph" in such words as "sulphur" and "phosphate," and spelling them "sulfur" and "fosfate," had not been found sufficiently important to justify the change.

The use of particular or proprietary names in the pharmacopœia has, of course, been avoided and such substances have as have earned a place in the work from their extensive use have been given names which are expressive and suitable, but the important change in the chemical nomenclature in the new pharmacopœia, which, it is believed, will commend itself to all and which has been in practical use by most chemists, is the dropping of the word "of" in such terms as "sulphite of sodium," which becomes, under the new method, "sodium sulphite."

In pharmacy, the new work shows great progress over methods in use during the past decade. The subject of percolation will receive greater impetus on account of the wide application of its principles than ever before. Discrimination, of course, has been manifested, and in a few instances where the physical structure of the drug rendered percolation impracticable maceration has been preferred.

The important class of liquid galenicals, the "fluid extracts" and tinctures, have had important additions made to their number. In nomenclature, a new class called "emulsas" has been created, and some of the former mixtures placed in it, and it is hoped that before another revision of the pharmacopœia pharmacy will have advanced to such a degree that we may have accurate definitions of the various classes of preparations.

The issue of the pharmacopœia will doubtless lead to the revision of the National Formulary, and there is every prospect that this work will prove, when published, of greater value than the one which is now in use, based upon the pharmacopœia of 1880.

Referring to the publication of the proceedings of the association, the president said that, owing to the necessary delay in publishing the annual volume, the suggestion had been made that in lieu thereof a quarterly journal be published, containing the report on the progress of pharmacy and current matters of interest, but the idea had not been favored, such subjects being already well treated in the pharmaceutical journals, which fully met the wants of the profession.

In closing, President Remington said that while careful deliberation upon subjects immediately affecting the interests of the association should probably be the first occupation of the association, yet the researches and labors of the great world beyond the sea should command most serious attention. This is especially the age of synthesis. Analysis is active and full of life, but constructive methods, at present, give to the world the more rapid and practical return than those which are destructive, and applied chemistry is calling large numbers to her allegiance. The last year has witnessed a wonderful development in chemical research, and as in electrical science it is entirely beyond human ken to foretell the possibilities of the future. Our chemical journals come to us teeming with facts and inventions and discoveries which tax the minds of the most active and erudite to even glance through and note. One must be gifted with mental endowments to be able to study even in meager outline the present status of this branch of science. The accumulation of facts which underlie the massive structure has been rendered possible lately through the development of specialism. The German professor of Greek literature who upon his death-bed confessed with regret the failure of his life because his study of the Greek articles had been unwisely extended to two instead of being limited to one admirably expresses the thought of the age. Yet, while we are not in danger of going too far in this direction, and it is customary for chemists to pity the worker who has not reached the point in his development where his field is cribbed and cabined and confined so that he can produce a mass of desirable phenomena which may ultimately be valuable, still all must have realized that the great need of the hour is for the calling into life of some great generalizing, comprehensive intellect, with a power of grasping the facts and arranging and classifying them in an orderly and systematic manner, and let us not cease to hope for this great master mind who will ultimately accomplish for the pharmaceutical chemist of our day what Cuvier and Linnæus did in their age for the branches of science with which their names will be forever linked.

The effect upon pharmacy and medicine of this extraordinary activity in the synthetic departments of chemical science has been profound. New chemical compounds and new classes of compounds

have been flooding commerce like a deluge, the more valuable ones being protected by letters patent or by copyright names. Competition among the large manufacturers is extremely fierce, and the result to the average pharmacist has been the greatest confusion, uncertainty and annoyance. It might be supposed that the Pharmacopœia would accept remedies of this class, but the convention of 1890 clearly defined its position as follows: "No medical substance which cannot be produced otherwise than under a patented process or which is protected by proprietary right shall be introduced into the pharmacopœia." (Applause.) It is clear that any substance which is controlled by one manufacturer or corporation becomes a law unto itself, and any test limitation or standard of purity established by the Pharmacopœia could be rendered nugatory at the whim of the manufacturer if it suited his purposes and the Pharmacopœia would stultify itself by admitting a substance under certain impurity limitations if it were found subsequently that the only substance that could be obtained in the market was one that deviated from the standard established.

It has not been deemed necessary in this address to bring forward, at this time, for any consideration, a new plan for the control of the sale of various medicinal preparations which have long been sold by druggists, but which have drifted into the hands of people engaged in other branches of retail trade. The Commercial Section of this association can be safely intrusted with the care of this troublesome matter, and upon their sagacious efforts we may rely, with certainty, for such relief as is possible.

The Sections on Scientific Papers and Pharmaceutical Education and Legislation will prove interesting and full of instruction to all our members, and without anticipating any of their work it can be safely promised that the papers which will be read and the discussions to be entered upon will be of absorbing interest.

On motion of Mr. Kirchgasser, the president's address was referred to a committee of three and the chair appointed as such committee C. L. Diehl, H. R. Slack and H. M. Whitney.

The secretary of the council, Mr. Kennedy, read the council's report on membership, and announced that in accordance with a resolution passed at the last meeting, the names of applicants for membership would be posted in a conspicuous place in the hall so that they might be examined and objections, if any, offered before final action at a subsequent session.

On motion, the minutes were approved.

Mr. Zwick moved that the chair be requested to appoint a committee of three to frame a resolution expressing the deep sympathy of the association with Permanent Secretary John M. Maisch, in his present serious illness, and to express also the deep regret experienced in losing his valuable services. The chair appointed on this committee Messrs. Hoffman, Zwick and Ebert.

The president next announced that Michael Carteghe, president of the Pharmaceutical Society of Great Britain was present and that he would have the pleasure of introducing him to the association. (Applause.) Mr. Carteghe would address

a few words to the association and his remarks would be listened to with the greatest interest by all present. (Applause.)

Mr. Carteghe then spoke as follows:

*Mr. President, Ladies and Gentlemen:*

I confess that I am not a little disappointed at this moment by the announcement just made, that Professor Maisch is unable to be present. I have a special reason for this, because I had conceived a little surprise for him. I am not quite sure whether I have not traveled faster than the mails, and that what I have to say may be news to you, but I happen to have in my pocket a gold medal, the Hanbury medal, which has been awarded to Professor Maisch. (Applause.) This medal, you will remember, gentlemen, is awarded biennially only. It was founded in honor of the late Daniel Hanbury, is international in its character and is not limited to any part of the world. It is not open to competition, it is open to no examination, but the award is effected by a process of selection and the officers of the principal societies in Great Britain are the officers who have to make this award. Under the terms of the trust deed, those officers are the president of the Chemical Society for the time being, the

professor Maisch. (Applause.) These men, I think you will admit, are men of very great distinction. In making this award of the trustees, I am charged by the council of the Pharmaceutical Society of Great Britain and by all its members to convey to Professor Maisch the congratulations hearty and sincere of all its members, upon the occasion of this award to a distinguished American pharmacist. (Applause.) The instructions that I carry with me are that this medal is to be awarded by the president of the International Pharmaceutical Congress at its meeting next week, and I think that may be probably arranged in due course, but it seems to me that under the circumstances I am in order in making this brief statement.

Well, sir, putting aside this one touch of sadness in our meeting, allow me to say that I attend here to-day and two of my colleagues are coming after me as fast as they can, we three members of the council of the Pharmaceutical Society of Great Britain, the other two being Mr. Martindale, of London, and Mr. Martin, of Newcastle—come not only to attend the meeting of the American Pharmaceutical Association and the special World's Congress, but come also to this meeting to express in the heartiest manner our cordial sympathy from the old

country to you, and to express our admiration for the work which you are doing. You, gentlemen, and we in the old country represent pharmacy so differently and so distinctly from the way it is represented in Europe generally and in all the older countries that we are, as it were, tied together specially to consider how best to advance our calling by mutual efforts, voluntary efforts rather than by stated ends. You know that you and ourselves have to do our work through cooperation through corporate bodies and associations and do our work without any subsidy from our governments. We have to encourage our young men to qualify themselves without the government itself taking, in most cases, a very active part, and I am not prepared to say that either you or ourselves have been wholly unsuccessful. (Applause.) It may be a question whether the continental system, where government, as a rule, gives help, is not the better one—that is a question—but whether or not, I am perfectly certain that the body I represent I am quite certain, sir, in the body that you now represent there is that liking for and that desire for free action, uncontrolled by State, that would make us at present hesitate to adopt the continental system. (Applause.)

Pharmacy, as you have hinted at in your address although very eloquently coupled with other matters, is not a calling in which we expect to get rich, and I don't suppose that any one of us ever contemplated when we entered it, or our parents before us, that we should become rich—if they did, they were foolish—but we have a right to believe, and I think we have reason to hope, that good qualifications and proper training and education on the part of the individual being possessed, we in the old country and you in the new may hope to get a living in the present state of the world, and that is something to be thought of. (Applause.) At any rate, in the old country, we only contemplate that at the present time. Of course, I am aware that in this great country you Americans do outstrip the universe both in pharmacy and in many respects besides, and also in the acquisition of immense fortunes. On the other hand, I don't know—possibly it's my ignorance—that any pharmacist in the United States or any number of them have or are likely to acquire from pharmacy what the people popularly call a fortune, and I'm not sorry that it is so. The business or profession of pharmacy is one that if it is worth anything it is worth working at. The man who complains of his pharmacy and of his fate I have always found to be a man who does not keep himself abreast of the work that is going on. The man who considers that education is not a power and that it doesn't mean money—I hold that it does—and the man who would carry on his business as a butcher does, an ordinary trade, and who would at the same time demand from the public professional remuneration for the things which he sells is not likely to get the respect of the public. It is true that we are under great difficulties on both sides of the Atlantic, for just as in the old country pharmacy spreads not from above, downward, but from the old medicine woman has been originated the practice of medicine in the old country and in many respects it has been the same in the United States, whereas, in the old continental countries, medicine came down from the professional classes. Well, that being so, we have, in our respective countries, to deal with a class of the public who imagine that anyone can prescribe for them and that anyone can compound their medicines. That is the natural condition of things until they are educated and it has taken us a long time in the old country to get the better educated portions of the community, not pharmacists, to realize it. You, I believe, in the large cities, are doing that, and have done that part successfully, and one great advantage you have over us, one for which I envy you, is the arrangement that you have for an enforced



JOHN M. MAISCH, PHAR. D.

Professor of Materia Medica and Botany, Philadelphia College of Pharmacy, Per. Sec. of the A. P. A., and Hanbury Medallist.

president of the Linnæan Society, the president of the Pharmaceutical Society of Great Britain, the president of the British Pharmaceutical Conference and one pharmaceutical chemist nominated by the two pharmaceutical presidents. Well, as a result of their deliberations a fortnight ago and under previous sittings, the award, as I have already stated, has been made, and I feel that officially, perhaps, it would be wrong for me to have made this announcement to you, sir, and to the members of the association, but I felt under the circumstances it would be the proper thing for me to do and I could not help referring to it in this manner. In awarding this medal to Professor Maisch, the fact of his work was well and carefully considered. You know the work for which this medal is awarded is high excellence in the chemistry and natural history of drugs, in the widest sense of the term, the sort of work that Hanbury used to do, and it would be presumptuous in me to make any reference to the merits entitling Professor Maisch to receive this award. All that I can say in regard to him is that he is a fit successor to the many distinguished men to whom that award has been made in the past, Flickiger, in the first instance, then Dragendorff, John E. Howard, Planchon next Hesse and lastly to Pro-

curriculum in most of your States, and the excellent opportunities you have for education, not only in Chicago, where I observe, although I have not yet seen them, but have read full descriptions of their new laboratories, but in all the principal cities have seen with great satisfaction, and shall watch with interest in the old country, this desire to give the best and highest education. What is wanted in pharmacy, as the president has said, is not that every pharmacist should be a highly trained and highly skilled synthetic and analytical chemist—some men there are who are so—but that is not absolutely necessary or even essential, but it is necessary and essential that every pharmacist should know something of the methods by which the weapons he uses in the cure of disease and under advice of the physician, are constructed, and to be able to ascertain by proper chemical processes that they are what they profess to be. If every man so educated insists in his own immediate neighborhood that proper remuneration for his services shall be given, I believe that in the old country and in the United States that before long the public will respect every one of us and will pay us for our services professionally. (Applause.)

Mr. Lord, the delegate from the National Wholesale Drug Association, followed Mr. Carteghe with a short address to the association, in which he stated that the organization represented by him was in hearty sympathy with the aims of the A. P. A. and wished the association every success in the labors of its commercial section at the present meeting. It was to be hoped that beneficial results would follow the deliberations regarding trade interests which would take place at another session.

President Remington, speaking of the number of strangers present, many of whom were from abroad, said that he earnestly hoped that every member of the A. P. A. would constitute himself a committee of one to see to their entertainment, so that their visit might be made especially memorable and enjoyable.

The secretary read the following reports by title: Committee of arrangements, by Henry Biroth; committee on delegation to visit the American Medical Association, by Jas. M. Good; treasurer's report, by S. A. D. Sheppard.

Professor Fennell moved that the American Pharmaceutical Association extend to Dr. Rice and his associates on the committee of revision of the pharmacopœia a vote of thanks for the presentation of the U. S. Pharmacopœia to American pharmacists, and that the members of the A. P. A. pledge themselves to indorse the sentiments expressed by President Remington and make the U. S. Pharmacopœia the standard work from Maine to California. Seconded and carried.

On motion, a recess of five minutes was here taken in order that members from the different States might select a nominating committee for election of officers for the ensuing year. On assembling, the following members were appointed from the States named:

Alabama—P. C. Candidus, J. J. McAfee. Arkansas—W. L. Dewoody, D. E. Shandel. Colorado—J. W. Turrell, C. M. Ford. District of Columbia—W. S. Thompson, S. L. Hilton. Florida—S. P. Watson, C. C. Harris. Georgia—Paul Pennisten, W. R. Cornell. Indiana—L. Eliel, G. W. Sloan. Illinois—C. S. N. Hallberg, H. W. Martin. Iowa—R. Upson, G. H. Schafer. Kansas—M. O. Miner, L. E. Sayre. Kentucky—G. A. Zwick, W. H. Averill. Louisiana—A. L. Metz, C. L. Keppler. Maryland—L. Dohme, Wm. Simon. Massachusetts—C. H. Price, F. H. Butler. Michigan—J. Verner, G. Gundrum. Mississippi—J. C. Means. Missouri—J. M. Good, H. M. Pettit. New Hampshire—A. C. Preston. New York—L. F. Stevens, J. Pfeiffer. North Carolina—R. Simpson, Mr. Charis. Ohio—L. C. Hopp, G. L. Hechler. Oregon—G. C. Blavely. Pennsylvania—W. S. Heinisch, Wm. McIntyre. Tennessee—A. A. Yeager, J. O. Burger. Virginia—W. E. Church. Wisconsin—E. Kremers. Canada—S. Lachance, Quebec.

Chairmen of committee on nominations at large: Messrs. Patton, Ebert, Whelpley, Whitney and Trimble.

The president appointed, as a committee on time and place of meeting, to report at the second session: Messrs. Sheppard, Ford, Whelpley, Eliel and Patterson.

At the request of President Remington, Professor Good reported on behalf of the committee appointed to visit the American Medical Association. In this report it was stated that the committee visited the meeting of the Medical Association, which was held at Milwaukee in June last, the members of said committee being Messrs. Hurty, Hollister, Dadd, Conrath and Good (chairman). A number of papers contributed by members of the A. P. A. were presented and discussed. The committee considered that the Section of Materia Medica deserved to be cultivated. To this end, papers and specimens for demonstration were invited for the next meeting, bearing in mind, however, that no proprietary preparations were admissible. The resolution passed by the American Medical Association, that the U. S. Pharmacopœia soon to be issued shall be adopted by physicians in prescribing, and pharmacists in compounding, and that both it and the National Formulary be made text books in the medical and pharmaceutical schools, originated in this section.

On motion, the report was received and referred to the committee on publication.

On motion, the convention here adjourned until 9 A.M., Tuesday, August 15.

After adjournment on Monday evening (Aug. 14) the members of the association were tendered a very pleasant reception by the local committee, meeting at the Casino in the World's Fair grounds, where several hours were most enjoyably spent. Music and refreshments were provided, and the grounds being illuminated throughout the evening, the celebration was of no common order.

#### SECOND GENERAL SESSION.

The second general session of the association was held at 10 A.M., Tuesday, August 15, in Hall xxiv. of the Art Palace.

At the appointed hour, President Remington called the meeting to order, and the proceedings were opened with the presentation of a report on membership by Mr. Kennedy, who stated that 113 new applications for membership had been received, which had been recommended by the council for favorable consideration.

On motion the report was approved and the applicants invited to become members of the A. P. A.

Professor Good, on behalf of the committee on nominations, presented the following report:

For president: Edgar L. Patch, of Boston; first vice president, E. O. Daly; second vice president, W. Rogers, Millersville, Ky.; third vice president, Charles Caspari, Baltimore, Md.; treasurer, S. A. D. Sheppard, Boston; permanent secretary, Jno. M. Malsch, Philadelphia; reporter on progress of pharmacy, Henry Kraemer, New York. Members of the council: C. L. Diehl, Louisville, Ky.; C. M. Ford, Denver, Col., and Wm. C. Alpers, Bayonne, N. J.

A ballot for the election of president was thereupon taken, Messrs. W. P. Overstreet and Hamilton being appointed as tellers. The ballot resulted in the unanimous election of Professor Patch to the office of president for the ensuing year.

On motion, the secretary was instructed to cast an affirmative ballot for the election of the other nominees, which was done, and their election to office announced by the chair.

Mr. Sheppard, on behalf of the committee on time and place of next meeting,

reported on behalf of that committee. He said that three places had been presented for consideration, namely, Asheville, N.C., Hot Springs, Ark., and Denver, Col. After careful consideration and discussion of the subject, the committee had decided in favor of Hot Springs, and that place had therefore been selected, and the date of meeting fixed for the first Monday in June, 1894.

Mr. Watson moved as an amendment that Asheville, N.C., be substituted for Hot Springs, Ark.

An excited discussion followed in which the claims of Hot Springs, Asheville and Denver were eloquently presented by representatives from those places, Mr. Morrison, of Montreal, finally making an appeal in behalf of Montreal, Can.

A ballot which was, at last taken, resulted in the selection of Asheville, N.C., a majority of those present preferring the location of that place to Hot Springs and Denver, which were thought to be too far away from the center of pharmaceutical interests.

Whiteford G. Smith, of Asheville, was selected as the local secretary, his name having been proposed for the office by a delegate from North Carolina.

The next business taken up was the report of the committee on National Formulary, of which Prof. Louis Diehl is chairman. The report outlines the work of the committee, but contained few matters of general interest, the committee remarking in conclusion, that nothing of a striking character can be submitted to the pharmaceutical profession in this department.

Dr. Hoffman, on behalf of the committee on resolutions to Prof. Malsch, presented the following, which, upon its approval, he said would be transmitted to the permanent secretary: "Professor Jno. M. Malsch: The American Pharmaceutical Association assembled conveys to you the heartiest greetings and the sympathy of its members in your sufferings. They keenly feel and regret your absence and trust that you may find consolation in the knowledge that their love and esteem are with you, and that your eminent and enduring services for the promotion of the association and for the elevation and advancement of pharmacy will ever remain an ornament in the annals of American pharmacy."

By a rising vote, the association unanimously adopted the resolution.

Mr. Kennedy reported, on behalf of the committee on membership, that since the meeting in 1892 more new members had entered the association than ever before, a total number of 210 having been entered on the rolls.

Secretary Whelpley read a letter from Professor Rice, chairman of the committee on revision of the pharmacopœia, to the association, in which he stated that official duties had prevented his attendance, but he had asked that copies of the new pharmacopœia be presented at the meeting. He hoped that the new work would be found complete and that it will give general satisfaction. The committee, however, will cheerfully receive any and all suggestions for further improvement, and recommend that the several committees on the pharmacopœia which have been already appointed or may hereafter be appointed by the association or by State pharmaceutical associations, forward copies of their annual reports directly to the chairman of the committee on revision to aid in the good work.

Henry Kraemer, reporter on progress of pharmacy, made a brief statement of the work that had been done by him during the past year, and on motion the report was accepted and referred for publication.

A recommendation was made in the report that a bureau of information be established by the A. P. A. which would furnish information gratis to any inquirer on matters of pharmaceutical interest.

Some discussion ensued in which several members contended that the idea was a good one, but a majority seemed to be of the opinion that the field was already well covered by the pharmaceutical press, which was always ready to give reliable information to those in search of it. The matter was finally settled by referring the recommendation to the council for consideration.

Professor Fennel, chairman of the committee on credentials, presented a list of colleges that had sent delegates to the meeting, the representation from these institutions being much larger than usual.

Treasurer S. A. D. Sheppard next presented his annual report, which showed a very encouraging state of affairs in regard to the association's finances, which were on a very sound and satisfactory basis in spite of financial disasters and the troublesome silver question. The report was received and referred to the publishing committee.

Professor Oldberg called attention to the fact that the British Pharmaceutical Conference was in session at Nottingham, England, and moved that the president of the association send greetings to that body with wishes for the success of its deliberations. The motion was carried unanimously, and a suitable message was at once dispatched.

The next report presented was that of the committee on prize essays, which was submitted by Mr. Kennedy. Among other things, it contained a recommendation that a resolution passed at the meeting of 1887 be enforced, which provided that the sum of \$150 be awarded to the writers of the three most valuable papers presented to the Scientific Section, apportioned as follows: \$75 for the first, \$50 for the second, and \$25 for the third; that a committee of three be annually appointed by the president of the association, whose duty it should be to decide whether one or more of the papers presented was worthy of a prize. It was to be understood that any recipient of the Ebert prize should not be debarred from also receiving one of the association prizes. Upon motion, the report was received and its recommendations approved.

Mr. Whelpley reported on behalf of the committee on the revision of the pharmacopœia that as the new pharmacopœia has not been issued for a sufficiently long time the committee has been unable to make any acceptable criticisms or great laudations of the work.

Professor Oldberg, of the committee on the international pharmaceutical congress, made a short statement concerning the work of this committee in providing for the meeting. He also outlined the programme that had been laid out for that body.

Professor Fennel presented the following resolution, which after considerable discussion was adopted: "Resolved, That the sum of one thousand dollars be and is hereby appropriated, to be placed at the disposal of the Seventh International Pharmaceutical congress by the council of this association for the compilation, publication, and distribution of an international pharmacopœia."

Secretary Whelpley read an invitation from the general officers of Armour & Co., inviting the association to visit the packing houses, and stating that a private car would be provided for the use of visiting members.

A letter was also read, that had been sent by the representative of Merck & Co. at the World's Fair, extending the hospitalities of the Merck Building to the association.

Another invitation was from the Illinois State College of Pharmacy, inviting members to call and inspect the new college building, laboratory, etc.

On motion, the invitations were accepted with thanks.

The association here adjourned till 9 A. M., Saturday, Aug. 19, giving place to the meetings of the Section on Scientific Papers.



S. A. D. SHEPPARD.

Treasurer of the American Pharmaceutical Association.

#### SECTION ON SCIENTIFIC PAPERS.

The Section on Scientific Papers held its sessions in Hall xxii. of the Art Palace, the first taking place at 3 o'clock in the afternoon of Tuesday, August 15. At that hour Professor Chas. T. P. Fennel called the section to order. Professor Frank G. Ryan, of Philadelphia, acted as secretary.

The proceedings were opened with the reading of the chairman's address. In this he spoke of the events of the Columbian year, among which should be noted the wonderful progress that had been made in chemistry and pharmaceutical science. American pharmacy, though comparatively young and unaided by the State, as was the case in European countries, had, nevertheless, eclipsed foreign pharmacy in the nature and scope of its practical work. This was manifested by the wonderful dis-

plays at the great World's Fair, where its products were preëminent in several lines. American pharmacy had in its ranks men who were known all over the civilized world, and wherever pharmacy was known the names of those past and present masters of the science were justly recognized. He referred to such men as Procter, Squibb, Parrish, Prescott, Maisch, Rusby, Lloyd, Parsons, Diehl, Remington. The same could be said of American institutions of pharmaceutical learning, which had already become the wonder of the profession abroad.

The chairman referred to the publication of the new pharmacopœia, and the great benefits which would undoubtedly result to the profession throughout the world through its appearance.

Summing up the work of the past year, it could be well said that there had been unparalleled progress in pharmacy in everything that constitutes an advanced and prosperous science, and one equal to any other on the globe. This was a tangible prophecy of a brilliant future for the American pharmacist. (Applause.)

On motion of Professor Whelpley, the address was received and referred to the committee on publication.

The chair stated that at the last meeting of the section in July, 1892, a committee, of which Professor Hallberg was chairman, had been appointed to undertake the compilation of an ephemeral publication containing brief descriptions of the new properties, uses and doses of such new remedies as appear from time to time, together with such pharmaceutical preparations as may have become sufficiently known to warrant it, such compilation to be published in convenient pamphlet form, at such intervals as may be deemed expedient, say quarterly, and to be distributed among medical men by pharmacists in their respective localities, the publication of such a work to be undertaken by the committee without expense to the association. The section would like to know what the committee had done.

Professor Hallberg, in reply, stated that until he received a copy of the proceedings at the beginning of the present year he was unaware that such a committee had been appointed. The time then being so limited it was deemed inadvisable to attempt the work. He had corresponded with Mr. Snow, of Omaha, and Professor Whelpley, of St. Louis, the other members of the committee, but the coöperation received had been unsatisfactory. Inasmuch as the committee had never been formally advised of its appointment, the members eventually declined to take any further action.

On motion of Mr. Ebert, this verbal report was received, and the subject dropped. Nomination of officers for the ensuing year being next in order, the members present were invited to present names for the respective offices. Professor Whelpley thereupon nominated Professor L. E. Sayre, of Lawrence, Kas., and Professor Sayre, in turn, nominated C. M. Ford of Denver, for the position of associate member or secretary.

The chair stated that, according to the by-laws, the election would take place at the second session.

The preliminary business of the section

having been concluded, the reading of papers was commenced, this part of the proceedings being opened by Professor Sayre, who read a long and interesting paper entitled: "Composition of Taraxacum Root at Various Seasons of the Year." This was followed by, "Laboratory Notes," by Professor E. L. Patch, and "Beef Extracts, their Manufacture, Composition and Therapeutical Effect," by Professor C. S. N. Hallberg.

The last named paper contained references to all the well-known beef extracts, which the author had tested, analyzed, and presented the results of his examination. This aroused a discussion, in which some of the members claimed that it would be unwise to use such names, because it was contrary to the custom of the association, which in such cases had provided that numbers instead of names should be given. If the names were given, parts of papers might be taken by manufacturers and used for advertising purposes as had already been done, or they might send representatives to read papers in which their goods were recommended and those of competitors condemned. Some of the speakers intimated that in case of unfavorable criticism, libelsuits might result. A large number present, however, favored Mr. Hallberg's procedure, and stated that without the names a paper of the kind was almost worthless, for the pharmacist who sold beef extracts would then have no means of knowing which was the best and which contained injurious properties, etc.

Professor Good finally moved that the writer of the paper be requested to designate his samples by number only and omit the manufacturers' names, and the motion being put by the chair was carried.

The next paper presented was by C. L. Wellcome, of London, Eng., entitled "On an Improved Shape for Suppositories and Bougies as Vehicles for Medication." After this came the following: "Atomic Weights," by Dr. Gustavus Hinrichs, and "Bougies," by Nicholas Pritzker, Ph.G.

The section then adjourned until 8 P.M.

#### SECOND SESSION.

The second session of the section was opened at 8 P.M., and the first business taken up was the election of officers for the ensuing year. On motion of Professor A. B. Stevens, the secretary was instructed to cast ballots for the unanimous election of the nominees, Messrs. Sayre and Ford as chairman and secretary. This having been done, they were declared duly elected.

The reading of the papers was resumed, the following being presented: "On the Preparation of Oak Tannins, with Reference to the Special Use of Acetone as a Solvent," by Henry Trimble, of Philadelphia; "Caulophylline (from the Root of Caulophyllum Thalictrifolium)," by J. U. Lloyd; "The Value of Titration with Volumetric Acid Solution as a Means of Assaying Alkaloidal Drugs and Galenical Preparations," by Charles Caspari, Jr., Ph.G. and Alfred Dohme, A.B., Ph.D.; "Canadian Potash," by Professor Reid, of Montreal (read by J. E. Morrison, of Montreal).

In a discussion that followed Professor Reid's paper, Professor Lloyd stated that, owing to the decrease in the manufacture and quality of American potash, the users of this material were looking to Canada as the source of their future supply. The Canadian article, he added, was of a high standard and was remarkably free from adulterants.

The next papers presented were: "Change of Volume when Liquids of Different Densities are Mixed," by Wilbur S. Scoville; "The Value of the Pharmacopoeial Requirements for Oil of Cloves," by Chas.

T. P. Fennel, Ph.G., Ph.D.; "Refractometers and Their Uses," by Prof. W. F. Edwards; "A Microscopical and Analytical Study of Coca Leaves," by Alfred R. L. Dohme, A.B., Ph.D.; "Commercial Varieties of Opium," by A. R. L. Dohme; "Hydrastis Canadensis," by F. A. Thompson; "Contribution to the Literature of Strychnin Determinations" (from the analytical laboratory of Parke, Davis & Co., Detroit), by J. B. Nagelvoort; "Gelsemium Semipervirens," by Chas. Otis Hill, Ph.G.; "Colocynth," by Geo. Wagner; "Investigation of the Menthol Derivatives," by Edward Kremers; "An Aseptic Irrigating Tube," by Adolph Levy.

The installation of officers which followed the reading and discussion of papers took place at one hour before midnight, so that long speeches were the exception. The new incumbents briefly acknowledged the honor of election, and assured the section of their intention to do all that could be done toward making the next meeting as successful as the one that was about to close.

The chairman in terminating the proceedings, referred to the attendance, which showed that great interest was manifested in the work of the section. In spite of the many rival attractions, the meetings had been well attended from the beginning to the end, while the papers presented were of an unusually high character.

The section then adjourned to meet at Asheville, N. C., in September, 1894.

On Wednesday, August 16, the association took a day off, and spent it at the World's Fair in ways most enjoyable, closing the festivities with a banquet in the evening. This took place at the Casino in the Fair grounds, and was given by the druggists of Chicago. Covers were laid for 600. Pills and prescriptions gave way to good humor, and the guests, as they listened to the music of the Schmoil orchestra, discussed the elaborate menu and listened to the eloquence of the speakers of the evening, concluded that Chicago, as an entertainer, can, in many respects, fairly lead the world.

During the evening the following toasts were responded to: The American Pharmaceutical Association, Prof. J. P. Remington; The International Pharmaceutical Congress, Michael Cartelghe; The Illinois Pharmaceutical Association, Dr. H. Lee Hatch; The Pharmaceutical Schools, Prof. A. B. Prescott; The World's Columbian Exposition, Dr. Selim H. Peabody; The Pharmaceutical Press, Dr. H. M. Whelpley; The City of Chicago, Geo. P. Engelhard; The Ladies, Prof. C. S. N. Hallberg.

In the absence of Willard H. Torbert, who had been expected to preside, Professor Remington acted as toastmaster.

#### SECTION OF PHARMACEUTICAL EDUCATION AND LEGISLATION.

##### FIRST SESSION.

This section was called to order at 9 A.M., Thursday morning, August 17, by Dr. R. C. Eccles, the chairman, the meeting being held in Hall xxii of the Art Palace.

The chairman delivered his annual address, in which he took up matters brought before the section at the last meeting, and stated what action had been subsequently taken regarding them. The address which dealt with pharmaceutical legislation more especially gave a complete history of pharmaceutical legislation in the United States, and discussed the good and bad points of various State enactments.

In closing, the chair said that it was the duty of the State pharmaceutical associations to thoroughly examine their laws to see whether they could not be improved,

as many of them undoubtedly needed improvement. He invited these organizations to express their opinions on pharmacy laws, so that the matter might be brought up in the shape of a report at the next meeting of the American Pharmaceutical Association.

In discussing the subject of pharmaceutical education, the chair said that his own opinion was that every druggist should receive a practical education before attending a college of pharmacy or getting theoretical training.

On motion of Professor Sayre, the address was referred to a committee of three for consideration, and the chair thereupon appointed Messrs. Sayre, Mittlebach and Caspari as such committee.

The chairman's address was followed by the reading of a paper by Samuel M. Colcord, of Dover, Mass., entitled "History of American Pharmacy." In presenting it the chairman said that its author was eighty years of age, and was the oldest member of the A. P. A. He had seen its rise and progress, and the paper was based on a more than average experience.

The paper gave a complete history of American pharmacy from the colonial period down to the present time, and included a full outline of the institution and progress of the American Pharmaceutical Association.

When the paper had been read, the chair invited remarks upon it, whereupon Alphonse Major, proprietor of Major's Cement, rose and said that no reference had been made to the institution and progress of saloon keepers.

The astonishment aroused by this strange comment had hardly subsided when Mr. Ellet, addressing the chair, said that he was sorry to say that the speaker (Mr. Major) was a member of the association; that he considered his remark an insult to the association, and one that no gentleman would make. He wished to announce that on Saturday morning next, at the general meeting, he would bring charges against Mr. Major for conduct unbecoming a member.

Mr. Major attempted to reply, and stated that what he had said was in the nature of a joke, but the chair declared him out of order, and sustained Mr. Ellet's position. The subject was then dropped and business resumed.

The next matter before the section was the nomination of officers for the ensuing year, and nominations being invited, Professor Sayre nominated the present chairman, Dr. Eccles, whose work for the section, he said, had been arduous and untiring, and the results were well appreciated by every member of the association. L. C. Hogan, of Chicago, the present secretary, was nominated for that office.

The reading of papers was then announced, and the first one presented was by Professor E. L. Patch, of Boston. It covered the following subjects: Legislation and Boards of Pharmacy, Education and Colleges of Pharmacy.

As the result of certain statements made in this paper, Professor Sayre moved that a committee of three be appointed to formulate and suggest a line of policy to be devised by the Section on Pharmaceutical Education and Legislation with reference to the admission of graduates of pharmacy without examination by boards of pharmacy. The motion was carried, and the chair appointed Messrs. Slack, Sayre and Conrath as said committee.

Before the session was concluded, the committee submitted the following report:

"Regarding the question of registration of graduates of pharmacy without examination by Boards of Pharmacy, it is the sense of this section that the best interests of pharmacy would be subserved by a non-recognition of diploma by State boards; that

there shall be no difference in the treatment of applicants for registration in pharmacy whether graduates or not."

The committee's report was accepted and its views adopted.

The next paper presented was one contributed by the secretary of the Lombardini Pharmaceutical Association of Milan, Italy, translated by Dr. Rice, of New York. It gave an account of the present status of pharmacy in Italy. On motion, it was referred to the International Pharmaceutical Congress.

Professor Wm. Simon, of Baltimore, read an interesting paper, entitled: "The relationship between gas volumes and molecular weights," which he illustrated with some models of ingenious construction that he had invented for lecture work. Upon motion of Mr. Slack, the thanks of the section were tendered to Professor Simon for his generous gift of these models to the scientific world, no patent having been applied for. "Their use in pharmaceutical education," said Mr. Slack, "will be of immense advantage to every teacher, Mr. Simon having overcome a difficulty that has been long experienced."

A paper entitled an answer to the query, "Why do so many pharmacists forsake their profession for the study and practice of medicine," by Henry N. Slack, M.D. Ph. M., La Grange, Ga., was next read.

Professor Remington here announced that Michael Cartelghe, president of the Pharmaceutical Society of Great Britain, who was present, had informed him that he would probably have to leave the city earlier than he intended. It would therefore be of interest to get his views on pharmaceutical education and legislation while there was an opportunity for doing so.

Mr. Cartelghe made a short address, in which he contrasted the conditions of the American with the English pharmacist, and the laws of Great Britain with those of the United States. He advocated practical training before examination and registration, but insisted that the theoretical training should be of a high standard. He, however, did not believe in examination altogether, because many men were able to learn like phonographs and repeat from memory, while others not gifted in that respect but more capable in a practical way were unsuccessful. A good preliminary education was the best means of obtaining good men for the drug business. He believed that a candidate for registration should have been trained in the store for at least three or four years, and that he should be compelled to pass his preliminary examination before entering that store. He denounced the practice of physicians acting as pharmacists, and explained what injury had been done in England through this system, where physicians having, by law, the right to compound their medicines intrusted this work to incompetent people. He also spoke against pharmacists intruding into the physician's domain, and was of the opinion that the pharmacist who could not, by sticking to his legitimate business, make a success of it, if thoroughly qualified, had no right to stay in it.

As to legislation, Mr. Cartelghe thought that the English system was a good one, where the government, while not having State boards of pharmacy, authorized the Pharmaceutical Society to officially examine applicants for registration, yet has representatives from the Privy Council present at such examinations, who strictly scrutinize the proceedings and see to it that the applicants are well qualified.

As to the condition of the drug business he did not believe with many that it was being lowered. In England at least he had

found that in all the larger cities educated people as well as medical men respect well qualified pharmacists, and in his judgment the amount of respect that any pharmacist gets from the public is exactly that which he can earn for himself if he knows his business and if he honorably carries on that business with refined professional feeling, with a due regard to his dollars as well as his conscience. Such a man will be respected as much as the physician. (Applause.)

The reading of papers being resumed the following were presented: 1. "Should candidates for graduation in pharmacy be able to make all preparations, a process for which is given in the United States Pharmacopœia?" by Prof. L. E. Sayre; 2. "What are the benefits and what, if any, are the losses to the community and to pharmacists by reason of the existence of pharmacy laws?" by H. M. Whitney; 3. "What are the benefits and what, if any, the losses to the community and to pharmacists by reason of the existence of pharmacy laws?" by S. A. D. Sheppard (another answer to the preceding query); 4. "Are pharmacy laws a benefit to pharmacists?" by Jno. H. Manning.

The next paper presented was by Prof. O. S. N. Hallberg, of Chicago, in answer to the query, "What should be the requirement of graduation in American colleges of pharmacy?"

After reading this paper, Mr. Hallberg presented the following resolution: "Resolved, that the following conditions shall determine what constitutes recognized colleges of pharmacy; first, age 21 years; second, experience in pharmacy four years, including time at college; third, two courses of at least six months each, extending over more than one year."

This aroused a discussion in which opinions for and against the resolution were freely expressed, a majority evidently being in favor of it. Mr. Ebert, however, thought that its passage might arouse antagonism on account of the differences existing between rival colleges of pharmacy in Chicago and their supporters, creating unpleasantness, which would be very undesirable. He hoped the resolution would not be adopted.

Mr. Sheppard, among a number of other speakers who indorsed the resolution, said that he hoped it would go through because it was an excellent move for the section to make. He offered an amendment, that it be referred to a committee of three to consider the propositions and report upon it at the next session or at the next meeting of the association. Mr. Hallberg accepted the amendment, and the resolution was then adopted. The chair appointed Messrs. Sheppard, Simon and Ford a committee to consider the recommendations contained therein.

Professor Sayre supplemented this report by offering the following resolution concerning certain statements made in the chairman's address with reference to pharmaceutical legislation: "Whereas, it is our opinion that the views expressed in the address of the chairman of this section should have the widest dissemination and that his views regarding the evil effects of ill considered legislation should receive the widest publicity. This resolution was also adopted.

On motion, the section adjourned until 3 P.M.

#### SECOND SESSION.

The section was called to order by Chairman Eccles at 3 o'clock.

The proceedings were opened with the presentation of an annual report by Secretary L. C. Hogan, which gave the sub-

stance of reports received from the secretaries of various State pharmaceutical associations regarding pharmaceutical legislation in their respective States. From all of these it appeared that it was impossible in too many cases to enforce the pharmacy laws where "political pulls" existed. During the past year the secretary himself had had charge of prosecutions against infringements of the Illinois State pharmacy laws, and had found a great lack of coöperation on the part of the State's attorneys. He had had cases brought up in country towns where the State's attorney had entered the court and ordered the case stricken from the docket without just cause. In every case, acceptable juries could not be found, while in others politicians have entered the place and said that unless proceedings were discontinued they would have the law repealed at the next session of the Legislature. The agitation in favor of pharmacy laws, during past years, had created a number of diverse laws in the various States, and made matters worse than where no laws existed. The laws were not generally a failure, but time and education on the part of the public alone could make them satisfactory. They were in the nature of police laws, and like all such laws were obnoxious to the American people, savoring as they did of class legislation. Pharmacists had been so vigorous in going before legislatures and insisting upon enactments and amendments that they had aroused legislators to investigating, and as is common in such cases had caused them to interfere in that about which they knew nothing. The only thing that could be done was to stand squarely by laws that were good, and do all that could be done, in a mild way, to enforce them endeavoring, in every way, to make them appreciated by the public. It is to be regretted that qualified licentiate from one State cannot be allowed to practice in another, but reciprocity is hardly practicable at the present time. The Arkansas law had met the difficulty recently by allowing a registered pharmacist from another State to register his certificate with questions asked him upon his examination in his own State, and a report from his State board, stating the rating received. If satisfactory, examination is permitted, and when passed, a certificate is granted. This was a common sense solution of the difficulty. While this is not reciprocity in the ordinary acceptance of the term, it secures to people advantages in the matter of delay and extra expense and furnishes the board with a chance to conclude intelligently and exercise sound discretion. The plan has been submitted to a number of boards in other States, but under a mistaken idea that it involved the acceptance of the Arkansas certificate if adopted, it has not been given the attention it deserves.

On motion, the report was received and referred to the committee on publication.

There was a ripple of excitement when the next paper was presented. The author not being present, Chairman Eccles offered to read it. It bore the title, "Legislation in Pharmacy," recommended the abolition of every pharmacy law, and was by Dr. Bowker, of Boston, a manufacturer of root beer, a well-known opponent of pharmacy legislation.

Dr. Bowker is not a member of the American Pharmaceutical Association nor any other organization of the kind, and this fact was pointed out by several members who discussed the advisability of receiving the paper. Several speakers stated that he had persistently attacked pharmacy legislation in order to make the drug business

so unprofitable that druggists would turn their attention to some other calling and probably be induced to handle root beer.

Mr. Whitney, of Boston, said: "I know the writer of that paper to be one of the greatest enemies of pharmacy legislation in the country. In Massachusetts he defeats us by every means in his power. Thus far, we have been able to lay him down and bury him deep, and that he should be resurrected by the American Pharmaceutical Association when the Massachusetts Board of Pharmacy has buried him seems to me to be too bad."

Chairman Eccles said that in his opinion both sides should be heard. Nothing could be gained from hiding one side. In his view, Dr. Bowker's arguments were weak, and would not hold, but to bring them up and prove by discussion that such was the case would be of benefit instead of harm. He therefore hoped that the paper would be received.

Mr. Whelpley: "We don't believe in building up straw houses for the sake of pulling them over. The paper should not be read. I move that it be rejected."

The motion was carried.

The Chair: I must say that while I agree with you in your opinion, I do not think it a wise policy to pursue with reference to the disposition of the paper.

The next paper read was by Professor Hallberg, and its title was "Draft of a Proposed Bill to Regulate the Sale of Patent Medicines." According to Mr. Hallberg's idea, every package or bottle of a proprietary remedy should bear the correct formula, and severe penalties should be enacted for adulterations in the compound or deviations from the printed formula.

Professor Fennel said that the paper properly belonged to the Section on Commercial Interests, and should have been presented there. He moved that it be referred to that section.

Mr. Whitney differed with Mr. Fennel, and thought Mr. Hallberg's action was correct in presenting the paper to the legislative section. He moved that it be received and referred to the committee on publication. The motion as thus amended was carried.

The following papers were then read: Answer to query, "Would it be a gain or loss to pharmacists to compel apprentices to pass a board of pharmacy examination on their general education before permitting them to begin work in a drug store?" by Rosa Upson, M.D. Two papers by W. Bodemann, of Chicago, with reference to some special lines of pharmaceutical legislation. "More Chemistry Needed—a Plea for the Extension of this Branch of a Pharmacist's Training," by Alfred R. L. Dohme, A.B., Ph.D. Answer to query, "Should any candidate be permitted to graduate in pharmacy before he is able to apply the tests and assays of the United States Pharmacopoeia?" by Dr. Wm. Simon.

A paper contributed by Chas. M. Troppmann, entitled "Danger of our Prescription Business," on motion was referred to the Section on Commercial Interests.

The committee appointed at the morning session to consider Professor Hallberg's resolution concerning the expression of an opinion by the section regarding the requirement for graduation by pharmaceutical students, reported that the subject was found to be of such importance that it requires not only consideration but correspondence with members who are not present at the meeting. The committee therefore asked to be allowed to report at the next annual meeting. The committee desires very much that throughout the coming year gentlemen connected with the various colleges throughout the country

will interest themselves in the subject and send any member of the committee a statement in regard to the position of their colleges or any other facts connected with the question, which will be greatly appreciated.

On motion of Mr. Whitney, the report was accepted.

The chair stated that he understood Mr. Ebert had a paper to present.

Mr. Ebert, of Chicago, stated that he had intended to write a paper on pharmaceutical legislation, but had not had sufficient time to do so. He would, however, express a few ideas in a brief address. In the first place, he thought that all pharmaceutical legislation had been a mistake, its only result having been to bring 50 per cent. more people into the drug business than would otherwise have been the case, and the condition of the druggist during the past twenty years had been growing steadily worse in consequence of this increased competition. He considered that registration should be confined to the proprietors of stores and not be granted to pharmacy graduates. He complained that when young men had gained sufficient experience in a store, the next thing they did was to open stores on the same street as their late employers and try to cut them out of business.

All this was wrong. He had a very poor opinion of board examinations. He had served on the local board and knew what he was talking about. There had been too much pharmaceutical legislation, and the less there was of it the better it would be for pharmacists.

The sense of the section was strongly against Mr. Ebert's propositions, and prominent members present did not hesitate to say that the pharmacist who could not stand competition of his ex-employees was a very poor man of business. Many speakers said they regarded, with pride, the fact that a number of their former clerks had become prosperous druggists in the same towns, and they had not found their own profits diminished thereby. Judicious pharmacy legislation was a good thing, and the examinations of the State boards had, as a general thing, been of great benefit to the profession at large. In this debate, Messrs. Sheppard, Whitney, Alpers, Whelpley, Rogers, Vernor, Hallberg and Torbert presented various arguments based on these points and opposing Mr. Ebert's views.

The next paper presented was by Wilhelm Bodemann, entitled "Change the Laws." In this paper, the present trademark laws which cover such articles as fluid extracts and certain patent medicines, etc., and prevent druggists from making them and selling them under their real titles, were denounced.

Many such articles were protected in the United States that were not protected in even effete European countries, and the druggist had to pay for it. The author instanced many proprietary and trademarked chemicals including antipyrine and other synthetic compounds. The American Pharmaceutical Association should attack the trademark octopus. Physicians had done much injury by accepting, using and recommending many "fake" articles of no therapeutic value. Any irresponsible concoctor could push a valueless article in this way.

The paper was referred to the committee on publication.

The reading of papers having been concluded, the next business before the section was the election of officers. Professor Whelpley took the chair pro tem.

A vote was taken on the nominees for the offices of chairman and secretary,

which were Dr. Eccles and L. C. Hogan and Associate Member T. F. Cummings, which resulted in their unanimous election.

The chairman and secretary elect briefly acknowledged the honor of election and assured the section of their future efforts in the cause for which the section labors, and their desire to do everything possible toward making the next meeting successful.

There being no further business before the house, the section, on motion, adjourned to meet at the next annual meeting of the A. P. A. in '94.

#### SECTION ON COMMERCIAL INTERESTS.

At 8 o'clock on Thursday evening (Aug. 17) the Section on Commercial Interests of the A. P. A. assembled in Hall xxii of the Art Palace, and at that hour was called to order by Chairman W. H. Torbert, of Dubuque, Ia. Mrs. Mary O. Miner, of Hiawatha, Ia., was selected as secretary pro tem., in the absence of the regular incumbent, Arthur Bassett of Detroit.

The proceedings were opened with the reading of the chairman's annual address. It dealt principally with the disposition of the A. P. A. plan for the protection of rates on proprietary articles. Regarding this, the chair said that by an action of the Proprietors' Association and the National Wholesale Druggists' Association at Montreal, the entire supervision of the plan and its execution had been intrusted to the Interstate League, and its enforcement recommended without material change. The details adopted for the execution of the A. P. A. plan at Montreal leaves the execution of the plan entirely in the hands of the Interstate League, and the American Pharmaceutical Association has assented to this, recognizing in the proprietors and the league the agency which shall execute the plan and lead the pharmacists of the country into a better situation.

An anomalous position had arisen, however, with reference to the plan. All cutting pharmacists in any city were to be put on the cut-off list provided the fact were certified to by three local members of the Interstate League, by the secretary of the league and by a member of the National Wholesale Druggists' Association. In Chicago, these conditions were all fulfilled, but the sub-committee on proprietary articles of the National Wholesale Druggists' Association held that where pharmacists were cutting in self-defense such pharmacists ought not to be denied their supplies. This conception destroys any virtue the A. P. A. plan may have if this construction is to be upheld, because the most vicious cutter could make the self-defense excuse. Therefore, the chair recommended that the American Pharmaceutical Association declare itself unequivocally on this subject and send a delegation to the meeting of the National Wholesale Druggists' Association at Detroit in October next to coöperate with the officers of the Interstate League in securing the enforcement of the A. P. A. plan in accordance with the provisions, conditions, terms and recommendations as set forth in the action of the Proprietors' Association at Montreal and also the action of the National Wholesale Druggists' Association. On motion, the address was referred to a committee of three to consider the recommendations made in the address and to present their report as may be found desirable.

In a discussion of the points contained in the chairman's address which followed, in which Messrs. Jamieson, Martin, Bodemann and Alpers took a prominent part, the same old ground traversed at former meetings regarding the cut-rate question was

again covered, nothing original being presented.

The consensus of opinion seemed to be that the Interstate League was too weak a body to effect much good, and that there was not sufficient coöperation on the part of the proprietors and wholesalers to insure success in maintaining rates. Mr. Alpers again attacked the business of handling patent medicines, and declared that nostrums should be regarded in the same light as tooth-brushes or other articles that druggists are compelled to sell; that wherever possible, pharmacists should put up their own preparations and sell them instead, and endeavor to lessen the demand for proprietary remedies.

Chairman Torbert took the floor and insisted that the Interstate League scheme was the only way out of the difficulty, and that the course of allowing that body and the manufacturers to enforce the provisions of the A. P. A. plan should be followed or at least tried to see what the result would be.

Mr. Bodemann finally moved that a committee be sent to the meeting of the National Wholesale Druggists' Association at Detroit in October next which shall coöperate with the Interstate League and insist upon the execution of the A. P. A. plan as agreed to at Montreal.

The motion was carried.

Mr. Alpers presented the following resolution:

*Resolved*, That although custom compels us to sell and handle such articles as are commonly known as patent medicines, the ingredients of which are unknown to us and the public, yet as professional men we condemn them as unscientific and directly opposed to legitimate pharmacy; therefore be it further resolved that we recommend to all pharmacists to discourage the use of such unscientific preparations and in their places to offer and sell preparations compounded by themselves in their own laboratories; and resolved, that we disprove of all plans upon contracts to regulate the prices of such unscientific articles as useless and detrimental to legitimate pharmacy.

In a long discussion that followed the presentation of this resolution, very little of a practical nature was brought out. Some of the speakers contended that the pharmacist should uphold his dignity as a scientific and professional man and ignore patent medicines as beneath his notice. But, as the chair very aptly remarked, this course was a good deal like the hunted ostrich burying its head in the sand, imagining that because it could not see the hunters that the rest of its body was invisible. The evil existed, and under the circumstances the idea of the pharmacist wrapping the drapery of the scientific autocrat about his dignified frame was absurd. Mr. Seabury followed his annual custom of making a few bright remarks about cutters, and told how hard he had tried to keep the wicked cut-rate men from getting his goods; but which somehow or other they manage to get, as several members reminded him.

Several speakers who came from towns where there is no cutting to speak of, explained how easy it is to control prices, but the less fortunate, who happen to be doing business in places like Chicago, found small comfort in their arguments.

Mr. Rogers, of Louisville, stated that the course pursued by the druggists of that city had enabled them to prevent cutting. Brotherly love between druggists existed in that city, and all worked together. Some time ago, when a large department store opened a drug department, a fund of \$10,000 was collected and a cut-rate establishment opened next door to it. Had it been necessary goods would have been given away free of cost. The consequence was that the competition soon ceased, and there has been no trouble since that time. If other cities would follow this example,

there would be little difficulty with cut rates and department stores.

This idea, as several speakers pointed out, while practicable in a comparatively small city, would be out of the question in places like Chicago where millions of dollars back the competition.

Regarding Mr. Alpers' suggestion that the druggist put up his own preparations in opposition to those of the proprietary medicine manufacturer, the discussion took a humorous turn.

Mr. Martin said: "I would ask Mr. Alpers this: If he calls Hood's Sarsaparilla or Bull's Cough Syrup unscientific preparations, would he call Mr. Alpers' Sarsaparilla and Alpers' Cough Syrup scientific preparations, or is it only one patent medicine manufacturer against another?" (Laughter.)

Mr. Alpers replied that the reason he would call Hood's Sarsaparilla an unscientific preparation is because the manufacturer claims that his remedy cures everything from a cold to Bright's disease.

Mr. Bodemann: If we adopt this resolution, we officially declare we are quacks, practicing medicine without licenses, and can be arrested and put in jail, because you have no right to suggest remedies without having a license to practice medicine.

Mr. Alpers: And yet that is exactly what these patent medicine men do every day—not directly, but through the advertising columns of the newspapers, which is about the same thing.

Mr. Stoughton: I favor Mr. Alpers' plan for maintaining rates. I have charge of a store that at one time had a large patronage and that went down. I took hold of it. I was told that I would last three years, and some of my neighbors said I would hold out six. The first thing I did was to throw out cigars; second, put patent medicines entirely out of sight; third, put up preparations of my own and printed the formula on the label. Well, the business went up from \$3.00 a month until the last account I took was nearly \$1,700, and we have done as high as \$2,000. The prescriptions increased from \$2,500 a year until last season we put up very nearly \$14,000 in one year, and it was all done without consulting any physician or anybody else. We rely on the public for our support, and when we have any favors to dispense we give them to the people we make money out of, and that of the people who bring the prescriptions to us. We give the physicians to understand we have nothing to do with them; treat them very courteously, but we do not send out Christmas presents to them or anything of the kind. If the drug business were carried on in a proper way it would be money in many a man's pocket. That is my opinion of the matter. (Applause.)

On motion of Mr. Jamieson, Mr. Alpers' resolution was laid on the table.

Mr. Sheppard took the chair while Mr. Torbert presented a resolution, in introducing which he said: "I have a resolution here which contemplates two things: first, the approval of the acts of our representatives by which we are bound; second, it will do a very great deal toward accomplishing what so many members of the association desire, by relegating these prolonged discussions that we have every year in this section on the cut-rate question, to the Interstate League, so that if anyone wants to hear further discussions upon it, he will have to attend the meetings of the league. My resolution is as follows:

*Resolved*, That this association hereby approves of the action of our representatives at Montreal, in leaving the execution of the A. P. A. plan entirely in the hands of the Interstate League.

I move the adoption of the resolution.

While the motion was under discussion, Luther F. Stevens, of Brooklyn, N. Y., aroused himself and hurled defiance at the opponents of the A. P. A. plan "Everything is defeated by cowards," he exclaimed. "There are cowards right on this floor, cowards on every side; I have no use for a coward." It was getting very late, however, and the cowards, if any were present, were too tired and sleepy to deny the allegation and defy the allegator, so the challenge passed unnoticed.

Mr. Torbert's motion to adopt the resolution was then put to a vote and carried.

Nomination and election of officers for the ensuing year being next in order, Mr. Stoughton nominated Mr. Rogers, of Louisville, for chairman, and Mr. Torbert nominated Mr. T. M. Jamieson, of Chicago, for secretary. A vote was taken, and the nominees were elected.

As it was close upon the midnight hour when the proceedings terminated, the eloquence of the evening having been expended on the cut-rate problem, orations were not made by the chairman and secretary elect, who acknowledged the honor of election in few words.

The section then adjourned, to meet again at the next annual meeting of the A. P. A. at Asheville, N. C., in September, 1894.

On Friday, August 18, there was no business transacted, as according to the programme that day was set apart for another visit to the World's Fair.

#### FINAL GENERAL SESSION.

At 10 A.M. on Saturday, Aug. 19, the final general session of the American Pharmaceutical Association was held in Hall xxiv of the Art Palace.

After the meeting had been opened, Mr. Whitney, of Boston, on behalf of the committee appointed to consider the president's address, presented the following report:

#### REPORT ON PRESIDENT'S ADDRESS.

"Your committee have carefully considered the president's address and find the various suggestions therein to be wise and practical. This meeting is perhaps the most important in the history of the association, immediately preceding, as it does, the International Pharmaceutical Congress and the issuance of the U. S. Pharmacopoeia for 1890.

We desire to congratulate the association upon having selected such a worthy representative of pharmacy to preside on this occasion, for no one could have given us such valuable information as he has done regarding the new pharmacopoeia, or so fittingly represented the American Pharmaceutical Association.

We emphasize the president's congratulations to the committee on revision of the U. S. Pharmacopoeia. We desire especially to join with him in his implied confidence, too, that the wisdom of our commercial section can be trusted to pilot the association in safety through this troublesome period.

A recommendation made in the address, to change the title of the National Formulary to the "American Formulary," however, we do not endorse, fearing that the change may lead to confusion and annoyance, and feel assured that when the words, "Issued by the authority of the American Pharmaceutical Association," as suggested by the president, are attached to the National Formulary, the results desired by the president will be secured.

We heartily approve of the suggestion that the proceedings be published in pamphlet form before the issuance of the regular annual volume."

On motion, the report was received and adopted.

President Remington announced that the Pan-American Medical Congress would take place in Washington in September next, and that a communication had been received from the secretary inviting coöperation in the formation of a Section on Materia Medica, similar to that established by the American Medical Association. The invitation had been accepted by him on behalf of the American Pharmaceutical Association, and it was understood that delegates were to be sent to the meeting. It was desirable to establish scientific as well

as commercial relations with the South American countries, and for that reason coöperation in the congress was very desirable.

On motion of Mr. Rogers the president's action was indorsed and he was instructed to appoint a committee to visit the Pan-American Medical Congress. The chair thereupon appointed on this committee Messrs. E. S. Thompson, of Washington, chairman, Professor Caspari, of Baltimore, and F. G. Ryan, of Philadelphia.

The next business before the house was the appointment of a committee to award the association prizes for meritorious papers, upon which action was taken at the second general session. The chair appointed on this committee, J. M. Good, W. J. M. Gordon and J. H. Stein. The committee's report, it was stated, would be made to the council after the association had finally adjourned, as time would be required to examine the papers carefully.

On motion of Mr. Whelpley, the president was instructed to appoint a special committee on membership, to consist of one member from each State and territory and one each from the District of Columbia, Nova Scotia, Ontario and Quebec, the duty of said members to be that of soliciting new members in their respective sections of the country, and to report the same to the secretary of the committee on membership.

The preliminary business of the session having been disposed of, Mr. Eliel arose to prefer charges against Mr. Major, as stated in the report of the first session of the section on pharmaceutical education and legislation. He related the circumstances that led to his complaint and strongly denounced the offending member whose conduct, he said, was a disgrace to the association. It was bad enough to occasionally see in the comic press, druggists referred to in connection with saloon keeping and retailing of liquors, but to have such an allusion made before the association by one of its members, was going too far. He therefore moved that Mr. Major, of New York, be expelled from membership in the American Pharmaceutical Association.

Mr. Sheppard remarked that while he condemned Mr. Major for his thoughtlessness in making such a remark as he had made, still, he had understood that he had apologized at the time, and said that his words were only spoken in the way of a joke.

Mr. Eliel replied that that was no excuse for such a remark. Besides this, Mr. Major was not a pharmacist, he is unconnected with the practice of pharmacy, and is engaged in the manufacture of glue.

A member inquired how it was that Mr. Major happened to be admitted to the association if he were not a pharmacist. The president replied that the records of the council would show, and that it would be necessary to look the matter up, but Mr. Major must have had some reliable indorsement in order to become a member.

Another member suggested that Mr. Major is an enthusiastic temperance advocate, has frequently written papers denouncing druggists for selling spirituous compounds in any form, and that he was led away by his enthusiasm in making the objectionable remark. He probably meant no offense by it.

Mr. Rogers moved that the matter be referred to the council with power to act as was thought best and if necessary to expel the offender. The motion was carried.

On motion of Mr. Whelpley, the sincere thanks of the association were tendered the druggists of Chicago and the members of the Illinois State Pharmaceutical

Association for the entertainment and courtesies shown to the American Pharmaceutical Association during the present meeting.

President Remington announced that Dr. Woodbury, of Philadelphia, the duly accredited delegate from the American Medical Association to the American Pharmaceutical Association was present, and would address a few words to the association concerning the relations between the two professions of pharmacy and the practice of medicine.

Dr. Woodbury, responding, made a short speech, very much to the point, in which he spoke of the great benefits which would eventually result from the establishment of the Section of *Materia Medica* by the American Medical Association by creating a better understanding between the pharmacist and the physician. The standing of the American Pharmaceutical Association was of the highest character, and that fact was well attested by its annual volume of proceedings, which show the excellent character of the work it is doing for the cause of scientific medicine. "The pharmaceutical branch of the medical profession," said Dr. Woodbury, "is handicapped by an unfortunate title, in my estimation, that of Graduate in Pharmacy. The capable pharmacist should have the title of Doctor as well as the practicing physician, for he is certainly entitled to it. (Applause.) It is a branch of the medical profession, but in these days of specialism, when the doctor cannot give the compounding of medicine sufficient attention, owing to the wide realm of clinics and therapeutics opened up in late years, he has to rely more and more on the skilled pharmacist. There should be a due recognition of these facts by both professions, and neither should intrude on the other's rightful domain. The physician should not act as pharmacist, and the pharmacist should not prescribe as a physician." (Applause.)

Dr. Woodbury, in closing, referred to Professor Remington's excellent work toward establishing the Section of *Materia Medica* in the medical association and creating feelings of friendship between the two professions, and, as a medical man, thanked him for his efforts in this direction. The sending of a representative by the American Medical Association to the American Pharmaceutical Association, for the first time, marks an epoch in the history of pharmacy and medicine in this country, and the present meeting is therefore memorable in that respect. (Applause.)

The installation of the new officers of the association was next in order, and the chair appointed Messrs. Simon & Gordon a committee to conduct them to the platform. The following prominent officers for the ensuing year were then introduced: E. L. Patch, of Boston, president; Leo Eliel, South Bend, Ind., first vice president; Wiley Rogers, of Louisville, second vice president; Prof. Charles Caspari, of Baltimore, third vice president. They briefly addressed the association, expressing their appreciation of the honor conferred upon them, and giving assurance of their determination to prove their belief in the principle, that a public office is a public trust.

S. A. D. Sheppard, who is annually elected to the office of treasurer, made a short address in which he congratulated the association upon the flourishing condition of its finances, and said that while there were fifteen hundred members in the association, there ought to be three thousand, and every member should constitute himself a committee of one in securing at least one addition to the rolls by the next meeting, for with a strong finan-

cial backing the association has the ability to do far greater work for the good of pharmacy than can otherwise be possibly accomplished.

Henry Kraemer, of New York, reporter on the progress of pharmacy, in acknowledging his re-election to office, asked the members to coöperate in his work. To this end he hoped everyone would read his preliminary report when it appeared in the proceedings, and where possible to write papers for the pharmaceutical press, which would be of assistance, also to write to him, personally, concerning the work. In this way, the report could be made even more complete than it has been in the past.

The installation of the new officers having been completed, Professor Remington said: "There is one name on this list of officers to which there will be no response, the name of Professor Jno. M. Maisch, our permanent secretary. The president, and secretary, however, have a communication from Professor Maisch which, I think, if read at this time, will be of great satisfaction to the members of this association, and will be the best introduction that Professor Maisch can have at this meeting."

The secretary then read the following:

"Philadelphia, Aug. 15, 1893.—To Frederick Hoffmann, A. E. Rbert and Geo. A. Zwick, Gentlemen: I would request you, as the committee which sent to me the kindly greetings of the American Pharmaceutical Association, to express to that body my heart-felt thanks for its expression of sympathy and its acknowledgment of my efforts in the cause of pharmacy. If those kind words are the sentiment of the profession, then surely I may entertain the hope which, at this time of trial and suffering, is a consolation and a satisfaction to me, that my labors in the past have not been entirely in vain."

On motion of Mr. Zwick, the grateful thanks of the association were tendered the retiring officers for their efforts to serve the association during the past year.

Professor Remington announced that it had been understood that the American delegates to the International Pharmaceutical Congress would be required to pay a fee of \$5 to be entitled to the privileges of the floor. This charge, however, had been withdrawn, and all members of the A. P. A. would be welcome to join in the congress without cost.

On motion of Professor Remington, a vote of thanks was given to Mr. Henry Biroth, local secretary, and to the members of the local committee, for their kind and laborious services toward entertaining visitors, and making the Chicago meeting a grand success and one memorable in the history of the association.

On motion of Mr. Sheppard, the association now finally adjourned to meet at Asheville, N. C., the first Monday in September, 1894.

A lake excursion, which had been arranged to follow the final adjournment, had to be abandoned owing to the condition of the water, which was too billowy to render a sail very pleasant. It was also too rough to allow a landing to be made at Lincoln Park, where a luncheon and reception had been planned. So the programme was altered, and instead of going by boat, the association went in tally-ho coaches, provided by the local committee, which had furnished the entertainment.

After a pleasant drive round one of Chicago's most beautiful parks, the members of the association lunched at the Park Casino, where a short time was very enjoyably spent.

The majority of the members from various parts of the country, it was understood, would remain in the city another week, to attend the Pharmaceutical Congress, and to see more of the Fair, which had been daily visited by most of them.

# World's Columbian Exposition.

## Agricultural Building.

(Concluded.)

The Algerian exhibit numbers some interesting objects, as, for instance, cork in large pieces as cut from the tree, also corks themselves and various articles made of cork; cinchona wine, vermouthe and some similar preparations, green and yellow olive oil, bark of Thapsin garganica, ergot, dissium—a semi-solid aqueous extract of ergot—the same in powder form, St. John's bread or locust bean, beeswax, linseed, etc.

The province of Jahore, on the Malayan peninsula, is represented by many substances of interest to pharmacists. Among these are cardamom, turmeric root, cinnamon, cloves, coriander—a larger variety than appears in our market—cummin seed, betel nuts, papaw fruit, white and black pepper, cubebs, nutmeg, mace, cocoanut oil, gutta percha in sheets, lumps, rolls, etc., gambier, lumps of copal varying in size from small bits to a piece weighing a number of pounds, artificial mineral waters, etc.

Siam is represented by ginger, both limed and unlimed, wax and long pepper, and Liberia by a few sponges, some india rubber in brown sheets, aloes, cashew nuts, divi divi, calabar bean, palm oil and soap, ginger, etc.

### EXHIBITS FROM SOUTH AMERICA.

Of the South American countries whose exhibits contain pharmaceutical articles may be enumerated Uruguay, Paraguay, Ecuador, British Guiana, and Brazil.

Paraguay has a medicinal exhibit consisting of 450 drugs or parts of plants growing along the Paraguay River. These are all arranged in glass jars, as in most of the South American exhibits the individual displays are not well labeled. These jars, for instance, simply contain inside the covers paper slips bearing only the common Spanish names, but little information can be gained from the attendants. However in this vast collection one readily recognizes various species of sarsaparilla root, eucalyptus leaves, verberna herb, cinchona bark, orange peel, quebracho, jaborandi leaves, etc. There is also in this connection some specimens of solid extract of quebracho, containing 70 per cent. of tannin, which appears to be used largely in South America for tanning purposes; presumably the bark does not there command the extravagant price it does in this country.

Uruguay is the only South American country represented by pharmaceutical preparations. In the Uruguayan pavilion are to be found elixir of peptonate of iron, compound elixir of popain, etc., also a small collection of perfumes, various wines, cognac, and Liebig's extract of meat in the various sized jars so familiar to us.

Ecuador is represented by india rubber from various districts, vanilla beans, coca leaves, cinchona barks, quinoa seed, cinnamon, several kinds of mineral waters, and some drugs not used in this country.

British Guiana has a pharmaceutical exhibit consisting of rum of various kinds, Demerara bitters, a remedy extolled for

diarrhoea and similar complaints, sarsaparilla root, greenheart bark, simaruba bark, cocoanut oil, copaiba balsam, and tonka beans in the shells.

Brazil has a large pavilion containing a rich treasure of vegetable materia medica. Many of the substances, however, are used exclusively in Brazil and the whole is thrown together in a most confusing mass. However the long roots of sarsaparilla and the bundles of the same wrapped with a grass, cinchona barks, manaca, coca leaves and other drugs common in our pharmacies are readily recognized. A list is being published by the government and more detailed information will be given in a future communication.

### QUEENSLAND AND NEW SOUTH WALES.

Among other countries represented in the Agricultural Building are Queensland and New South Wales.

The Queensland Eucalyptus Oil Co. distills volatile oils from twelve varieties of eucalyptus leaves, and of these six are presented at the Fair. Among these are the oil of melaleuca leucadendron, eucalyptus populifolia, eucalyptus crebra, a brown oil, etc. The firm makes a specialty of the oil of eucalyptus maculata, var. citriodora, which is an almost water white oil of an odor greatly resembling citronella and is recommended by the firm for many ailments. This exhibit is adorned by a collection of stuffed Australian animals like the kangaroo, opossum, etc. In the New South Wales there is nothing of interest besides two specimens of what are denominated by us "patent" medicines, viz., Australian Hop Bitters and Universal Extract of Sarsaparilla, both of which, are, of course, of no special interest.

### OTHER AMERICAN EXHIBITS.

There are still a few American exhibits in the Agricultural Building not yet mentioned, the exhibits of the products of our packing houses. The Cudahy Packing Co., of South Omaha, Neb., has in this display an exhibit of pepsin in scales, saccharated pepsin, glycerole of pepsin, essence of pepsin, granular pepsin, powdered scale pepsin, lime juice and pepsin, extract of beef and fluid extract of beef, all of which are shown in packages of several sizes. Nelson Morris & Co. show refined and No. 1 lard oil, neatsfoot oil and extract and fluid extract of beef; Armour & Co., gelatin, glue, fluid extract of beef, etc., and Swift & Co., scale pepsin, saccharated pepsin, pancreatin, beef extract, etc.

In the southwest corner of the building is a very interesting exhibit showing the work of agricultural colleges in this country. Here are herbaria, all kinds of chemical apparatus, a room for germ culture, microscopes with slides of bacteria and sections of plant parts, works on botany, a chemical laboratory with all the necessary appurtenances, etc. In fact, this is one of the most interesting portions of the building.

The balance of the building is devoted to the various State exhibits, these are artistically arranged but, are of more interest to the ruralist than to the pharmacist.

## Forestry Building.

Pursuing the subject in proper sequence one would naturally next visit the Forestry Building, the building containing the forest products. This building is unique among the many unique structures at the Fair. No iron enters into its construction, but it consists almost entirely of wood, the various supports being made of tree trunks, each trunk representing a distinct specimen of the forest. The location of the building is southeast of the Agricultural Building; it adjoins the Anthropological and Ethnological Building and overlooks the lake.

There are a few exhibits of direct interest to the pharmacist in this building. The products represented consist mostly of sections of tree trunks which furnish lumber useful for cabinet purposes. Here Spain has an exhibit of strips of cork. Oregon is represented by bundles of Oregon grape root, cascara sagrada, and wild cherry bark. The Brazil pavilion has large bundles of sarsaparilla, several large jars filled with tonka beans, specimens of jequirity seeds, manaca root, pareira brava, and a number of other medicinal plant products. Ohio has a fine exhibit of medicinal substances, which consists of dried herbs from this State which furnish the medicinal product mounted on paper and inclosed in an oak frame with a glass. On the same sheet is a specimen of the plant part itself which is employed in medicine. To Prof. W. A. Kellerman, Ph.D., of the Ohio State University, belongs the credit of collecting and arranging this group of 75 representatives of the vegetable kingdom. Among the products displayed may be mentioned American sarsaparilla, ginseng, poison hemlock, alum root, witch hazel, agrimony, dewberry, stone root, scullcap, stramonium, gentian (*G. quinquefolia*), etc.

Mexico is represented by a number of lumps of gum chicle, mezquite gum and a green vegetable, also a large array of barks for tanning purposes. New South Wales has but a number of large bundles of various kinds of wattle bark, which is used for tanning purposes, also the same in the ground and powdered forms.

The State of North Carolina makes an excellent showing with nearly 500 jars containing specimens of medicinal plant parts. These are tastily displayed in glass-labeled one-pint wide-mouth bottles by Wallace Bros., of Statesville, N. C.

The most artistically displayed exhibit in the building is that of Armstrong, Brother & Co., of New York, which has branches in Pittsburgh, Chicago, and St. Louis. The products of the firm consist of corks and articles made of cork. The pavilion consists of mirror-topped counters to form a square; upon these counters are placed glass jars—alternating the globular and cylindrical form—containing corks of all sizes. The front of the counters is faced with cork to form the usual panels. From the four corners of the pavilion rise pillars of cork, from the tops of which are blue banners, trimmed in gilt, and inscribed with the names of the various branch houses of the firm.

(To be continued.)

## News and Notes.

### Pharmaceutical Association Meetings.

#### MONTHLY CALENDAR.

September.

| Date.      | Association.         | Place of Meeting  |
|------------|----------------------|-------------------|
| Sept. 5... | Colorado.....        | Pueblo.           |
| " 5...     | New Hampshire....    | Isle of Shoals.   |
| " 11...    | Prop. and Dealers .. | Detroit.          |
| " 12...    | Virginia.....        | Blue Ridge Sp'gs. |

### North Carolina Association.

The fourteenth annual meeting of the North Carolina Pharmaceutical Association assembled in the Chamber of Commerce Hall, Greensboro, on Wednesday, August 9.

The meeting was called to order by President H. R. Cheers.

After prayer by Rev. J. Henry Smith, D.D., the president introduced A. M. Scales, who delivered a very appropriate address of welcome, which was responded to by Hal Bobbitt, of Raleigh.

The president read his annual address, which was listened to with interest.

The courtesies of the floor were extended to Dr. Winston, of the University; to the physicians of the city, and to the traveling salesmen present.

The following were elected members of the association: James McN. Johnson, of Aberdeen; Wm. F. Hall, Jr., Statesville; Gaston M. Ward, Z. V. Conyers, John B. Farris, S. S. Haithcock, Greensboro; A. Walter Moore, Mt. Pleasant; E. D. Fisher, Durham; J. Hicks Bunting, Joseph C. Shepard, R. R. Bellamy, Wilmington; Alice Elizabeth Johnson, Aberdeen; J. DeMorris, Roxboro; A. B. Cates, Burlington; Geo. W. Gaskill, New Berne.

The treasurer, secretary, and the treasurer of the Board of Pharmacy, made their reports, showing the finances of the association to be in good condition.

The association has taken a good deal of interest in the Sunday closing movement and adopted a resolution asking every pharmacist in the State to express their preference to the association, through the secretary, by the next meeting as to the hour of closing at night; asking that they close earlier, and whether or not they approve closing on Sundays, allowing only one store to be opened on that day.

After the transaction of other business of a routine character, the election of officers for the ensuing year was taken up, and the following members duly nominated were duly declared elected.

President, N. D. Fetzter, of Concord; vice presidents, J. Hal Bobbitt, of Raleigh; P. W. Vaughan, of Durham; and Augustus Bradley, of Henderson; secretary, F. W. Hancock, of Oxford; treasurer, A. J. Cook, of Fayetteville.

Member of the Board of Pharmacy—P. W. Vaughan, of Durham.

Local secretary—W. G. Smith, of Asheville.

Executive committee—R. L. Dixon, of Milton; W. M. Yearhy, of Durham; W. H. King, of Raleigh; Chas. Fetzter, of Reidsville.

Asheville was selected as the next place of meeting.

### Georgia Association.

The eighteenth annual meeting of the Georgia Pharmaceutical Association was held at Rome on Thursday, Aug. 10.

The members were welcomed to Rome by J. D. Gwaltney, and a fitting response on behalf of the association was made by H. R. Slack.

The president, E. M. Wheat, then delivered his annual address which contained many suggestions of value to the members. Papers on pharmaceutical subjects were read by State Chemist Geo. F. Payne, J. G. Goodwin, E. M. Wheat, R. L. Tye and J. W. English.

The election for officers resulted as follows: president, C. M. Crosby, Marietta; vice presidents, G. F. Payne, Atlanta; D. W. Curry, Rome; W. F. Mims, Americus. H. H. Arrington, secretary and treasurer.

### North Dakota Association.

The eighth annual meeting of the North Dakota Pharmaceutical Association was called to order by President A. I. Widlund, at Grand Forks, on Tuesday, Aug. 8, at 10 A.M. E. C. Cooper, president of the City Council, extended the freedom of the city to the visiting pharmacists. C. R. Meredith, of Casselton, responded in behalf of the association. After disposal of routine business, and discharge of various committees, the following officers were elected for the ensuing year: C. R. Meredith, of Casselton, president; O. Granrud, of Grand Forks, first vice president; A. L. Lien, of Hillsboro, second vice president; W. S. Parker, of Lisbon, secretary and treasurer. Papers were read by R. J. Lindberg, of Fergus Falls; J. J. Lindberg, of Whapeton; E. C. Krueger, of Forest River; and A. I. Widlund, of Grand Forks.

The candidates for vacancies on the State Board of Pharmacy are W. S. Parker, C. R. Meredith and A. I. Widlund. The next meeting of the association will be held at Grand Forks, on the first Tuesday in August, '94. The local secretary is Robt. Bergand, and the chairman of entertainment committee, J. H. Reynolds.

### North Dakota Board of Pharmacy.

At a meeting of the board held at Fargo on August 11, the board organized by electing H. E. White, of Jamestown, president; W. S. Parker, Lisbon, secretary and treasurer. Applicants for registration by examination shall be required to answer correctly not less than 50 per cent. in each of the following branches, viz.: Pharmacy, materia medica, chemistry, and the identification of drugs and chemicals, a general average of not less than 70 per cent. A class of thirteen presented themselves for examination of which three were successful, viz.: M. U. Green, Jamestown; Carl Lind, Minneapolis; Oscar Hallberg, Fargo. E. D. Irvin, Ph.G., was registered on presentation of his certificate.



William Hurd Madison.

The subject of this sketch, who has recently received the appointment of instructor of pharmacy in his *alma mater*, the College of Pharmacy of the City of New York, was born at Whitesboro, Oneida Co., N.Y. on December 10, 1868. When 12 years of age, his parents moved to Brooklyn, N. Y., where young Madison's education was received. In 1885 he entered the drug business under Wm. P. De Forrest and 3 years later became connected with the Bolton Drug Co., Brooklyn. He graduated at the New York College of Pharmacy in 1889 and at once identified himself with the Alumni Association of which he was elected secretary twice in succession. Mr. Madison was a director of the Bolton Drug Co., also W. B. Riker & Son Co., and when the new store of the Bolton Drug Co. was opened (the largest establishment of its kind in Brooklyn) Mr. Madison was placed in charge. He conducted this business with much success until a few weeks ago, when he resigned to assume his new duties as instructor in the College of Pharmacy of the City of New York.

When an effort was made in the beginning of this year to unite the pharmacists, clerks and proprietors, of New York and Brooklyn, in an organization which should have for its object the advancement of the profession along lines of science and better fraternal relations, Mr. Madison was one of the first to lend a helping hand, and he was elected vice president of the New York Society of Apothecaries. He has been an indefatigable student and has devised quite a number of appliances to facilitate the work of the busy pharmacist.

The college has made an excellent selection in the appointment of Mr. Madison, who we feel sure will prove an able assistant to Professor Coblenz.

## With the Advertisers.

### Wine of Coca.

The estimation of a medicated wine with respect to character and quality is something which demands the exercise of skill and experience. In examining any commercial sample of Wine of Coca we naturally direct attention to its taste and aroma—the latter when present in marked quantities constituting good evidence of the thorough exhaustion of the leaves. This is to be found in the Wine of Coca advertised by the Wohlfarth Pharmaceutical Company on page 50 of this issue. Besides its character and quality, the manner in which it is put up for sale should attract the favorable attention of druggists. The bottle is a squat pint of the style usually adopted for Coca Wines, and is attractively labeled. We can cheerfully commend this article as being well worthy of the consideration of the drug trade as well as the physicians throughout the country.

### United States Botanic Depot.

The firm of Walter Adams & Co., 105 William street, New York, is one of the oldest botanic drug houses in the United States. It has been before the drug trade of the country for over sixty years and in that time has won the confidence and patronage of druggists and dealers everywhere by high standard quality of goods and straightforward business methods. The line of goods which Walter Adams & Co. import and deal in include crude, crushed, powdered and pressed roots, herbs, barks, etc. They are also agents for Henry Thayer & Co., and Dr. D. M. Elmore's Rheumatic Goutaline. Druggists should bear this firm in mind when ordering pressed herbs or other vegetable drugs.

### Cosmetic Emulsion.

If imitation is, as it is believed to be, a sincere form of flattery, then A. S. Hinds, of Portland, Me., is a much complimented individual. Few of the proprietary articles handled by druggists are so imitated or subject to so much substitution as the widely known skin preparation known as "Hinds's Honey and Almond Cream." But notwithstanding this, the original preparation commands an extensive sale, and if we are to judge by the number of testimonials which the maker receives from month to month, it still enjoys the bulk of public favor. A. S. Hinds is popularizing the "Honey and Almond Cream" both with the retail druggist and his customers. To the former he makes a special offer, particulars of which, as will be seen on reference to our advertising pages, will be sent to all druggists mentioning this paper. Uniformity of product and an attractive package makes it popular with the customer. Druggists should write for a supply of samples for gratuitous distribution among customers, as this will contribute to an increased sale of the cream and other lines.

### Ricksecker's "Martha Washington Perfume."



MARTHA WASHINGTON.

It was a graceful and patriotic impulse that led the American people to style the wife of George Washington "the first lady in the land," and it was an excellently well conceived idea upon the part of Theo. Ricksecker to compound a perfume which would share in the perpetuation of her name and take rank among other perfumes as "the first perfume in the land."



RICKSECKER'S MARTHA WASHINGTON PERFUME.

The accompanying cuts illustrate the prominent features of the "Martha Washington Perfume" bottle and package. Label, bottle and package all appeal strongly to the popular fancy, and among dealers the opinion appears to be general that no other perfume sells with so little effort.

There is a lingering sweetness about all of the Ricksecker perfumes which is peculiar to these perfumes alone, and it is this individuality, as it were, which serves to make them so widely popular. Mr. Ricksecker's designs for containers, such as bottles, flasks and jars, are striking in their originality and contribute not a little to the remarkable sales which follow their introduction into any drug store.

### On Soda and Soda Fountains.

Hance Brothers & White say "The big drygoods stores in the cities are putting in soda fountains, not so much for profit, they say, as to please their customers. Soda is just as good an attraction to a drug store as to a dry goods store.

"It is worth more now than ever before if managed well, because it is better than ever before; at least it can be.

"Not one in a dozen druggists knows what we mean when we speak of fine soda. Not one in a dozen druggists knows what we mean when we speak of success with it."

"Most of the druggists waste their best opportunity."

"Soda is everywhere; but not fine soda. Millions of people have never tasted it fine, but they will at the first opportunity. That is your opportunity."

"To be a druggist is more than to serve soda agreeably; but you need not fear competition from those that fail in soda water."

"There is no reason to stop liking fine soda."

### The Humphreys' Medicine Co.

The Humphreys' Medicine Company, New York, announce on page 40 a renewal of their offer to give a French plate beveled glass mirror, together with books, picture cards, and counter wrappers, to any druggist ordering one dozen Humphreys' Witch Oil (trial size).

The order can be sent either direct or through any jobbing house in the United States.

### A Valuable World's Fair Book.

The Passenger Department of the Baltimore & Ohio Railroad Company has prepared for general distribution a handsome pamphlet descriptive of the scenic and other attractive features of that road from New York to Chicago. This book should prove invaluable to those visiting the World's Fair. In its artistic cover, illustrations and reading matter, it is fully up to the high standard which has been fixed by the B. & O. for publications of this character. The scenery en route, which has gained for the B. & O. the richly deserved sobriquet of "Picturesque," the public buildings at Washington, old Harper's Ferry, Luray Cavern and other attractive points are faithfully portrayed. The value of the publication is increased by descriptions and illustrations of the principal buildings at the World's Fair. This book can be procured free of charge upon personal application to ticket agents, B. & O. R. R. Co., or you can have it mailed to you by sending name and address with five cents in stamps to Chas. O. Scull, General Passenger Agent, Baltimore, Md. World's Fair tourists should bear in mind that the B. & O. is selling tickets at very low rates, good going via Washington and returning via Niagara Falls.

## INDUSTRIAL CHEMISTRY IN GERMANY.

The number and variety of the important derivatives of coal and wood tar produced in Germany, whether intended for employment in medicine or the industrial arts, suggest the existence of extraordinary enterprise and skill on the part of the manufacturers there and does not fail to give the impression that, in original chemical research and the wise and methodical application of new discoveries, the scientific industrial laboratories of that country hold an exalted rank in the high-class industries of the world.

This is, in fact, the case. There has rapidly grown up in Germany a group of commercial organizations for chemical re-

search and preparation, which are conducted upon a plan so well devised, so extensive and so wisely regulated as to compel the admiration not only of manufacturing chemists everywhere, but of all who justly value that highest type of modern progress—advancement from previously considered and rational foundations.

The following description, taken mainly from an article by Henry E. Armstrong in a recent number of *Nature* (No. 1228), of one of the most extensive of these laboratories—that of the Farbenfabriken Vormal's Friedr. Bayer & Co., Elberfeld, Germany—is presented to the reader with a view to satisfying his natural curiosity as to the internal arrangement of these great commercial, yet scientific, establishments, whose material prosperity is almost wholly dependent upon discoveries made within

its own walls in the most interesting and important of all sciences—that of chemistry.

"Recently when giving evidence before the Gresham University Commission," remarks Mr. Armstrong, "I had occasion to speak of the attention devoted in German chemical laboratories to higher studies, and when asked what were the results of this instruction, I drew attention to the article published a short time before in that most enterprising of chemical periodicals, the *Chemiker Zeitung*, edited by Dr. Krause. In this article a description is given of the research laboratory provided to accommodate six and twenty skilled

extent in Germany during recent years and which owes its development in the first instance to the extreme attention paid to chemical science in Germany at the universities and technical schools. Whereas formerly, the color industry owed its progress almost entirely to the schools and their celebrated leaders, of late years knowledge in this great field has become so specialized that a determining influence can be exercised only by one who is directly connected with the *personnel* of the establishment.

Since the color works have begun to give special attention to derivatives of coal and wood tar, not only in the dyers' interest but



FIG. 1.—FARBENFABRIKEN: LABORATORY AS SEEN FROM THE STREET; WORKS ON RIGHT, OFFICES ON LEFT.

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chemists, attached to the works of the Farbenfabriken Vormal's F. Bayer & Co., of Elberfeld, who are manufacturers of dyestuffs and other products derivable from tars. I told the commissioners that if at the present time it were desired to fit up a research laboratory for chemical purposes in London, we could not do better than to take these plans and reproduce them in their entirety, and that we should then, I believed, have reason to congratulate ourselves on possessing the best appointed research laboratory in the world."

The following particulars are mainly taken from the number of the *Chemiker Zeitung* above referred to.

In any industrial enterprise of the present day, standing still involves retrogression, and this is especially the case in the color industry, which has developed to such an

in the service of medical science, and since it has been recognized that the protection afforded by a patent does not retard, but, on the contrary, promotes an industry and is therefore to the general good, competition has so increased that all the works concerned are forced to make every effort to prevent their destruction in the struggle for existence. Consequently all the larger color works within recent years have erected laboratories in which a large number of disciples of chemical science are unceasingly engaged in the endeavor to meet the growing wants of the dyer by adding to the already large number of artificial coal tar colors, not only with the object of producing colors of increasing beauty, but also to meet the growing desire for colors of greater stability, and especially with the object of entirely displacing the natural dye-

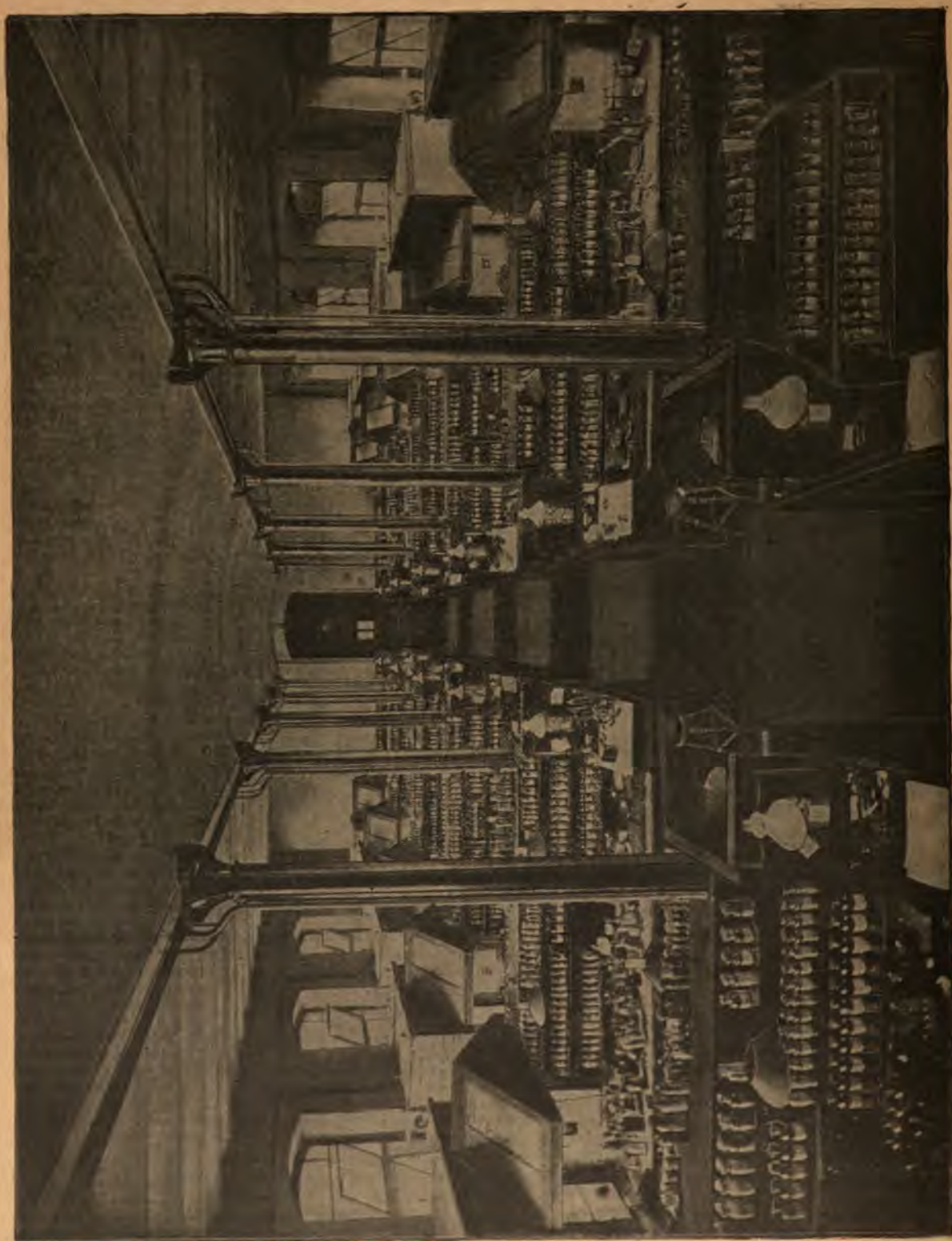


FIG. 2 — FARBENFABRIKEN: LABORATORY FOR TWELVE CHEMISTS, SIX ON EITHER SIDE OF MAIN PASSAGE.

stuffs which were formerly exclusively used. These technical laboratories are necessarily arranged with special reference to the requirements of the industry, and therefore differ in many respects from the laboratories at the universities and technical schools which are used for teaching purposes.

The laboratory of the *Farbenfabriken Vormals Friedr. Bayer & Co.*, at Elberfeld, opened toward the close of 1891, is the newest institution of its kind.

Fig. 1 is from a photograph of the building taken from the street. The object in view was to provide all necessary rooms for twenty-six chemists. In order to make full use of the site, however, rooms for certain other purposes were also included. The laboratory adjoins the offices of the firm and the dye house, and also the physi-

the stairway on either side of a corridor are two rooms, about 9 feet by 18, one of which is a combustion room, while the other contains balances and other physical apparatus. The whole of the remaining space, 79 feet long by 47½ feet deep, is fitted up as a laboratory for twelve chemists, and comprises twelve separate working places, besides two for larger operations, which are for common use. This arrangement has the advantage that each chemist has at his disposal a separate laboratory for his own use without the room having been deprived of its uniform character. Figure 2 is from a photograph of the laboratory, Fig. 3 representing a single working place.

The first floor includes a room 26½ feet by 10½ for the use of the director of the laboratory; a room 32 feet by 18 used as a library; a room 19 feet by 10 is for special

of construction. The basement floor is cemented; the remaining floors are covered with a special kind of clay asphalt which withstands hot and strongly acid liquids. The drainage water is carried away in open channels constructed in the floor. Electric lights are used throughout, the large laboratories being each illuminated by means of arc lamps, and the other rooms by incandescent lamps.

Air is admitted through openings in the upper part of the windows, the foul air finding sufficient means of escape up a shaft (in which there is a spiral staircase) at the end of the large laboratories, and which terminates in a large opening in the western gable. Special care is taken to remove fumes evolved in the chemical experiments. For this purpose a large number of earthenware pipes 6 inches in diam-



FIG. 3.—FARBENFABRIKEN: WORKING PLACE OF ONE CHEMIST.

ological laboratory. The new building is 117 feet long and 54 feet deep.

A large portion of the basement is fitted up for apparatus, etc., and is connected with the laboratories above by a stairway and elevator. Luxurious provision is made here for the comfort of the staff, rooms with wardrobes being provided, in which they may change and store their clothing, while twelve separate bath rooms with hot and cold water are near at hand, together with an extensive lavatory with twenty-four basins. The heating apparatus for the baths and a low pressure steam heating apparatus are placed next to the wall at the end of the building, and here also niches are constructed for apparatus in which materials can be heated under pressure.

The ground floor is about 19¾ feet high from floor to floor, excepting at the eastern end, where it is 3 feet 4 inches deeper. The eastern higher portion is divided by a floor into two low apartments fitted up for experimental dyeing. Next to this and beyond

use; and this floor contains, also, a large laboratory corresponding to that on the ground floor, with places for thirteen chemists. A gallery supported by iron brackets is constructed along the side of this room, but on the outside of the building, in which experiments involving the production of specially unpleasant odors can be made. This gallery is approached through a glazed doorway constructed in one of the window places; but experiments going on there can be overlooked from the laboratory within, through the windows.

The second floor is divided into two portions by a partition wall, one part being occupied by the printers engaged in preparing the various labels, notices, etc., required by the firm; the other being used by the bookbinders who make up sample books, etc. The attics are used as store rooms. The building is simply constructed, mainly of brick, stone being used for the window sills only. The edifice is characterized throughout by simplicity and solidity

eter are built into the walls between the windows in the large laboratories and elsewhere. These are carried up and connected with asphalted flues, which eventually terminate in a large air shaft carried out above the roof. The necessary draft is secured by means of a large fan placed at the base of the shaft, which is driven by the engine in the printing department. At right angles to the walls, on both sides of the rooms and between the windows, hollow walls are built out about 7 feet, on either side of which draft closets are constructed (see Fig. 2). Flue pipes, such as have already been referred to, are let into these walls.

Passing over numerous interesting details of construction, the arrangement of the laboratory may now be referred to. Each place is so arranged as to constitute a complete laboratory with every necessary provision, while at the same time there is nothing to prevent the various chemists from working together, and nothing to

hinder the general supervision of the laboratory.

The arrangement is best understood by reference to Figs. 2 and 3, of which the latter shows a single working place.

The two side work-benches are connected by the window work-benches, so that each chemist has command of a table about 49 feet long. The bottles on the

drawers and cupboards, containing all apparatus that can possibly be required, and also such chemicals as salt, potassium chloride, sodium acetate, etc., which are used in large quantities. In Fig. 3 a sliding shelf will be seen projecting from a cupboard on the right hand side, carrying measuring cylinders inverted over pegs.

Each drawer, or cupboard, has its spe-

the usual openings above, with rings, etc., and has within it a drying oven surrounded by boiling water, a wooden drying closet being placed below, in which articles may be dried by heat radiated from the water bath above. The waste water and steam pass away through the hollow wall at the back of the closet, in which there is a channel communicating with the drain.



FIG. 4.—A SECTION OF THE FARBENFABRIKEN EXHIBIT AT THE WORLD'S FAIR.

shelves of each plant contain 180 different agents, among these being all the substances in use or produced in the works, so that, if desired, any combination tried in the laboratory may be at once reproduced on a large scale in the works. The pipes for gas, water, compressed air and vacuum are carried in a space behind the shelving, and can be easily got at for repairs, the shelving being removable. The work-stands, except at the windows, are covered with lead. Under them are numerous

special purpose, and is carefully labeled, the same arrangement being maintained throughout the laboratory. Thus the attendants are able to see that each chemist is supplied with all necessary apparatus. On either stand next the window is a closed draft closet, and a hood, which may be connected by a movable window. In one of the closets there is a large copper water bath, in which steam, previously cleaned from rust, condenses and can be drawn off as boiling distilled water. This bath has

On either side of the window a pipe connected with the general ventilation system is let into the wall. A funnel shaped hood can be attached to this pipe so that experiments involving the evolution of fumes may be carried on at the window bench. This bench, however, is chiefly used for titration work, and therefore shelves are affixed to the wall some distance above it on either side, on which large bottles are placed containing the standard solutions.

It will be seen from Figs. 2 and 3 that a

sink is placed at the end of the stand on the one side, and that there is a desk at the opposite side; adjoining this desk is an ice cupboard let into the stand, on the cover of which a balance for weighing out substances used in the experiments is placed. By the provision of such an ice cupboard at every chemist's place a great saving of ice

benches; taps are provided in a convenient situation, so that, if necessary, the supply of water, etc., to a bench may be at once shut off. The water pipes are covered with flannel to prevent the water which condenses on them from dropping. Each working place is provided with 4 taps for compressed air, 4 vacuum taps, 11

either end of each of the large laboratories for use in case of the clothing of the chemists or laboratory attendants catching fire. Every bottle on the shelves is not only clearly labeled, but numbered, so that it is easy for the lad who has to keep the place clean and in order, however ignorant he may be, to arrange them properly; more-



FIG. 5.—FARBENFABRIKEN EXHIBIT: VIEW OF THE MAIN FACADE.

has been effected: it is not only available for the storage of ice—nowadays an indispensable laboratory agent—but things can be kept cool in it for considerable periods—over Sunday for example.

Four differently colored pipes for water, gas, compressed air and vacuum run along the ceiling, and from these branch pipes are carried down the columns to the

water taps, 14 gas taps for heating purposes, and 9 gas burners (in case of failure of the electric light). A steam pipe runs along the wall, from which there are branch pipes connected with "purifiers" conveying steam to each of the large water baths before referred to, and to a valve under the hood adjoining the closet.

A shower bath depends from the ceiling at

over, each particular chemical occupies the same position in the row of bottles in every chemist's place in the laboratory.

Each chemist has a lad to assist him, who washes all vessels, keeps the stands clean and the apparatus in order; in fact does what he is told, even helping in the experiments. In addition, there are in each laboratory three lads under the super-

vision of an older laboratory servant, who at once avail themselves of any opportunity offered by the absence of the staff to "tidy up" in regions not specially committed to the charge of the young assistants. The order and cleanliness thus secured extending even to keeping the leaden bench tops polished, is most remarkable.

Each chemist is so completely screened from his neighbor that he is not only able to work undisturbed, but practically in secret; he is only open to observation from the place on the opposite side of the main gangway and the chemists are usually so placed that of the two working at these benches either the one is a junior under the direction of the other or they are working in cooperation.

"As a further illustration of the perfec-

peared in full uniform. Those present, however, by turning on all the water taps in the neighborhood of the fire and directing the water to the burning bench had already extinguished the flames. The room was filled with a dense black fog, but by opening the windows and a valve in the main ventilation system near the ceiling, this was very soon gotten rid of. The origin of the accident was simple enough; a young chemist fresh from the university and unaccustomed to work with large quantities, had allowed his laboratory boy to heat a couple of liters of the hydrocarbon toluene, which he was using in recrystallizing a substance, in a glass flask, over a bare flame."

Another striking feature in the large laboratories is a series of brass valves arranged along the wall under a hood oppo-

glow lamps being arranged as resistances.

In the balance room besides balances, there is a large arc lamp with special lenses designed by Prof. Von Perger, of Vienna, used in ascertaining the effect of light on colors—in these days sunlight can no longer satisfy the needs of German industrial enterprise—colorimeters, spectroscopes, and other apparatus are also to be found in this room. Color chemists are not fond of making analyses if it be possible to characterize substances by any other means, the combustion furnaces are therefore but little used, and a number of ovens in which pressure tubes are heated have supplanted most of them.

Adjoining the research laboratories there is a "technical laboratory" full of apparatus exactly like that in use in the works, but of



FIG. 6.—FARBENFABRIKEN EXHIBIT: VIEW OF THE SIDE FACADE.

tion of the arrangements," Mr. Armstrong continues, "I may quote from an account before me of a visit to the laboratory a description of the steps taken to put out a fire. An explosion was suddenly heard and flames and a dense cloud of smoke were seen to ascend from one of the benches. All the chemists in the room rushed at once to the spot. The particular chemist was found to be unhurt, but the clothes of his laboratory boy were on fire. He was dragged to the shower bath, and the fire at once put out. Meanwhile the laboratory servant had given the signal by means of an electric fire alarm provided in the room, and within two minutes the twelve men on duty, of the twenty-four members of the work's fire brigade, ap-

site the bench for general use; the labels under these valves bear the names oxygen, carbon dioxide, chlorine, sulphur dioxide, phosgene, methyl chloride, hydrogen and ammonia. These various gases, compressed in cylinders enclosed in cupboards in the basement, can be used at any time by communicating through a speaking tube to the man in charge of the store department, who then opens the valve on the cylinder containing the required gas, so that it only remains for the chemist to open the valve in the laboratory.

In the lower laboratory one chemist's place only is distinguished from all the others, being fitted up for electro-chemical work with the necessary current measuring instruments, a series of about 50

smaller size. Here experiments are carried out on a somewhat larger scale than in the laboratory prior to the processes being effected on a large scale in the works; and the staff in the laboratory are also engaged in making many of the chemicals required to replenish the stores for use in the research laboratories.

The stores are in charge of two superintendents, one of whom is educated as a glass blower. It is worth mentioning also that all thermometers, prior to their issue from the store, are there compared with a normal standard thermometer.

The laboratory was designed by Dr. C. Duisberg, the director. The necessary architectural assistance was afforded by Herr Bormann, architect to the works.

The foregoing is but a very imperfect account of this marvellous research laboratory. A more typical and concrete illustration of the appreciation of the value of science by German manufacturers, however, could not be possibly found, yet it is only one of many that might be cited.

It may be mentioned with the foregoing that Messrs. W. H. Schieffelin & Co., of New York, are the representatives, in the United States of America, for the sale of the pharmaceutical products of the Farbenfabriken vormals Friedr. Bayer & Co., of Elberfeld, Germany.

At the Columbian Exposition, in Chicago, the Farbenfabriken have limited themselves to exhibiting preparations of a pharmaceutical character only, especially those referred to previously. Liquidated gases, like chlormethyl and other substances, the transportation of which might be attended with difficulties, do not appear in the display nor do their color products.

The group comprises two sections, the main facade and the side facade. The situation is the first in the Department of Chemical Industry, and the visitor facing it when entering the pavilion cannot help being impressed with the handsome appearance of the entire display.

The main facade is used for showing the pharmaceutical products on an extensive scale, while the side groups present the preparations as they appear in their original packages.

The decorations should be seen to be fully appreciated, but the exhibit may be briefly described as follows: As center piece the figure of "Hygeia" will be observed, around which the different products are placed in large glass jars of a diameter of 20 inches. Among them may be noted Piperazine-Bayer, a product which has been patented by the Farbenfabriken in America; and nearer at hand you will find large glass jars of Sulfonal and Phenacetin. Alternating with these you will find Salophen and Trional, and in the side groups of the main facade are small bell jars filled with Trional and Salophen. Grouped around these products are Aristol, Europhen, and finally Losophan, one of the latest products of the Farbenfabriken.

The main facade is connected with the side facade by an exhibit of the salicylic group. In the background, the paneled announcement of the house, over 6 feet high, will be observed, giving an idea of the works of the firm. The whole ornamentation is executed in rococo style, the draperies being of olive velvet.

The side facade, containing the original packages, comprises three sub-divisions representing the following groups: 1. Antipyretics; 2. Hypnotics; 3. Sedatives; 4. Dermato-Therapeutics. Each one of these three sections is put up in pyramidal form and is composed of the various packages of the products beginning with 1 and 2 lb. packages, ending with the smallest or 1 ounce packages. To each group a large glass sign has been attached to explain in what shape the products are selling in America. Sulfonal, for instance, appears in the main group in a crystalline form; you will find the same preparations in the side facade, in the form of a fine powder.

In the first group, Salophen and Phenacetine are mentioned, followed by the hypnotics, which are especially represented by immense quantities of Sulfonal, surrounded by its two rivals Trional and Tetronal.

The third group, marked "Dermato-Therapeutics," contains such preparations of the Farbenfabriken as are intended for external use. The largest group below is composed of the various packings of Europhen; the center group is made up of Aristol, and the smallest one of the latest addition to cutaneous remedies, Losophan. Further views of the different preparations can be obtained in the large showcases.

Between the first and third group two pedestals arise, whereon large bowls filled with Piperazine-Bayer have been placed, and around which packings of the product have been grouped.

Further particulars and technical literature may be obtained on application to the representatives, W. H. Schieffelin & Co., of New York, or in Chicago of the custodian of the exhibit, which is to be found in the German Chemical Section of the Manufactures and Liberal Arts Building.

### Prescriptions Accurately Dispensed.

The *National Druggist* remarks that English medical and pharmaceutical journals are somewhat prone to poke fun at American pharmacy, but we opine that our critics would have to travel a long way in this country before finding a case as bad as the following, which we clip from the *Medical Press and Circular* (London):

"A dispensing chemist was fined £5 a short while since in one of the London police-courts. His scales, according to the evidence of an inspector of weights and measures, were six grains out of the balance. Prisoner, who admitted that the scales were faulty, was found by the inspector lying on a sofa in a room behind the shop, which was left in charge of a little boy. He was also intoxicated when apprehended on warrant. He did not belong to the Pharmaceutical Society, and indeed he appeared to possess no proper qualification. This state of affairs is somewhat startling, to think that the lives of innocent people may be left in this fashion to the tender mercies of a small boy armed with grossly defective scales!"

### The "Patent Medicine" Advertiser.

The American people should sell themselves body and soul to the nostrum-vender, or else combine to get some laws passed to curb his boundless greed and impudence. Go where one will, every barn, house, field, rock, or sign-board is turned into a blazing memento of our national disgrace, and of medical humbug. Pills, pills, pills! "The Gentleman's Friend," "Blood-regulators," "Pectorals," tonics, and heaven knows what else! Wherever the eye of child, girl, maid, man, or mother turns, there is the allusion, open or half-concealed, almost always filthy, to suggested disease. The images called up are those of pathologic conditions of the kidneys, of the genito-urinary organs, of the discharges from the bowels, of syphilis—of all the results of vicious, moral, or unphysiologic living. Is there no way to put a stop to such outrages against common decency?—*Medical News*.

### To Purify Croton Water.

Plants will be established at Kensico and at Sodom with a total capacity of 240,000,000 gallons daily for purifying the Croton water supplied to the City of New York.

Each plant will have a 25-horse power boiler, a 15-horse power steam engine, a 5-horse power dynamo, an electrolyzing tank of 1,000 gallons capacity, and a 3,000 gallon storage tank. To the water in these tanks is added a solution of chloride of sodium, bromide of sodium, sulphate of potassium, sulphate of lime, sulphate of magnesia, and chloride of magnesia. Common sea water will answer the same purpose. The passage of an electric current through this water changes the chloride to hypochlorites and the bromides into hypobromides. The contact of the hypochlorites with any organic matter causes instant decomposition.

This system is to be used only in the Summer. The process will not make the water absolutely pure, but it will remove all discoloration and bad taste.

### The Medical Corps of the Army.

The position in the medical corps is a most honorable one. The pay and emoluments are quite reasonable, while original investigation and study relating to scientific medicine or hygiene will receive due encouragement.

A recent innovation, that of establishing a school of instruction at Washington for the junior medical officers of the army, will prove a great gain to the young officers who have heretofore been compelled to gain their knowledge of the requirement of military service largely from experience.

There are at present five vacancies in the corps, and five more will occur within a year. To save unnecessary expense to candidates, those who desire it may have a preliminary physical examination and a mental examination in the "elementary branches of a common school education" by a medical officer of the army stationed most conveniently for this purpose. This will enable those who would be rejected on account of physical defects, or whose preliminary education is unsatisfactory, to ascertain the fact without going to the expense of visiting a distant city for the examination, and will save them the humiliation of being known at home as rejected candidates. It will also diminish the number of rejections by the board.

There has been a mistaken idea, due to the large number of rejections, that the examination is unreasonably severe; as a matter of fact this is not the case, and the considerable number of rejections has been due to the fact that a large number of applicants have been men whose English education was defective and who have appeared before the board without having made any special preparation for the examination in professional branches.

### Exposition Judges.

The following named chemists have been confirmed as judges in the Department of Liberal Arts (chemical and chemico-pharmaceutical products) by the National Commission.

Marcus Benjamin, Charles F. Chandler, New York; J. D. Humphrev, Huntsville, Ala.; A. B. Prescott, Ann Arbor, Mich.; Ira Remsen, Baltimore; William Simpson, Raleigh, N. C.

### Examination Questions of the California Board of Pharmacy.

**PHARMACY**—S. H. MELVIN, Examiner.  
Describe the *modus operandi* for producing the following:

**Decoctions**—What is the usual relative proportion of the substance to the water used?

**Infusions**—Give a general formula to be used in absence of specific instructions by the prescriber?

**Elixirs**—Give constituents and proportions of *Elixir simplex*.

**Percolates.**

**Emulsions.**

Write in Latin one prescription for each of the following with full directions—using the metric system:

**Pills; six powders; collyrium; liniment.**

Name the official aquæ made by distillation.

What are the U. S. P. tests for aqua pura?

What is glucose and how is it prepared?

By what test is glucose distinguished from cane sugar?

Give process for preparation of chloroform, its sp. gr. Test for purity.

How is iodoform prepared? What are the official preparations of it?

What is the source of sulphur? What is the difference between sublimed and precipitated sulphur? and which is preferable for internal use, and why?

What is an alkaloid? Give a process for the separation of one from the plant.

Name an official spirit made by chemical reaction and give working process for same.

Give process for preparing *liq. plumbi sub-acetatus*. State reactions and per cent. of sub-acetate of lead.

What is creasote obtained from and which kind is considered best for medicinal uses? How is wood creasote distinguished from carbolic acid?

How is pepsin prepared, what are its chief compatibilities, and its best solvents? What is its function in the digestive process?

**CHEMISTRY.**—J. H. FLINT, Examiner.

How would you test a powder for starch?

For corrosive sublimate?

For sugar of lead?

From what is glycerin made? And what are its principal impurities?

From what is glucose made?

To make nitrate of silver pills with bread what should the bread be free from?

What is the difference between nitrate of silver and lunar caustic?

If sodium bicarbonate be mixed with California wine what reaction takes place?

From what is tartaric acid obtained?

What is argols?

How would you distinguish bromide from iodide of potassium?

How would you recognize the acid from the base in potassium iodide?

In what chemical state is the lime in lime water? What causes the white deposit on a lime water bottle? How can it be removed?

What is the difference between Donovan's solution and Fowler's solution? When Donovan's solution has become dark colored how may its color be restored? What percentage of arsenic is in each solution?

What is the chemical difference between a ferric and a ferrous salt? Which salt is contained in the tincture?

What will take place if you add sulphuric acid to morphine, salicine, sugar, potassium chlorate?

What is Fehling's solution? Mention a test for albumen in urine?

**TOXICOLOGY.**—H. J. FINGER, Examiner.

Name the principal official preparations of mercury, (a) giving the official names; (b) give the symptoms of long continued use of mercury on the system; (c) give antidote or treatment for the effects from long continued use, and the theory upon which a certain drug (naming it) is used; (d) name antidote for corrosive sublimate?

What are the poisonous symptoms of chloral hydrate; what would be treatment and antidote? What is the distinction between chloral hydrate and croton chloral hydrate and what difference in their effect upon the system?

(a) What alkaloids are obtained from nuxvomica; (b) give symptoms of poisoning by the principal one and antidote; (c) how would you distinguish one from the other by chemical means?

Name the principal official preparations of arsenic, giving official names; (b) name official preparations used as antidotes for arsenical poisoning; (c) how are they prepared and why is one to be preferred to the other?

(a) What are the poisonous effects of opium; (b) what is the principal alkaloid; (c) name the official preparations into which opium enters; (d) what is the antidote and treatment in poisoning by opium, and what counter-poison is used in each case; (e) how much opium should laudanum contain?

(a) What is a poison; (b) what is an antidote; (c) what is meant by a counter-poison; (d) name a poison and its antidote; (e) name a poison and its counter-poison?

(a) From what is phosphorus made, what per cent. is contained therein and what per cent. is obtained; (b) what are the poisonous effects and what emetic should always be given in cases of poisoning by phosphorus and why?

(a) What is the antidote for poisoning by oxalic acid and why should carbonate soda or potash not be used as antidotes; (b) after the proper antidote has been used how would you test the contents of stomach to prove the presence of oxalic acid?

What is the poisonous effect of antipyrine, what antidote should be given to modify its effect; what is the antidote for poisoning by tartrate of antimony and potassium?

**MATERIA MEDICA.**—W. M. SEARBY, Examiner.

Give uses and doses of the following:

1, tincture aconite; 2, wine of antimony; 3, salol; 4, fluid extract ladies' slipper; 5, fluid extract bittersweet; 6, codeine; 7, boric acid; 8, Creasote; 9, resin of jalap; 10, fluid extract belladonna.

**Camphor.** (a) Give botanical name of the plant, state the part from which it is obtained, and how? (b) What is the difference between camphorated oil and oil of camphor? (c) What effect do the following substances have upon camphor; 1, water; 2, glycerin; 3, carbonate of lime 4, salol; 5, chloral hydrate. (d) For what is it used internally, and in what doses?

What plant produces pulsatilla? What part is used? How can you recognize it? For what is it used? Give dose.

What parts of arnica are official? Name the official preparations made from each.

What is the official name of soap-bark? Where grown? For what used in pharmacy?

**Cascarilla.** Give botanical name, habit and part used. What are its medicinal uses and dose of fl. extract.

**Gum Arabic.** Give botanical name of source and place of growth. How can you prove that the powder is not adulterated with other gums or with flour?

What is cochineal? Upon what plants found, and where? What is its valuable constituent?

How do you recognize lobelia? Which is the more active, leaves or the seed? What is its active principle? Give its use and dose of the powdered leaves.

Give the botanical name of the plant that produces coca leaves. Where does it grow? How can you distinguish it from other leaves? What are its active principles?

### Pigments Used in Some India-rubber Toys.

India-rubber has been generally, and correctly, accepted as a suitable material for children's toys; but investigation into the manufacture of the latter reveals the fact that many as placed upon the market contain harmful ingredients. A. Bulowsky, according to *Science*, has recently called attention to several dangerous ingredients, as, for instance, in black dolls, which are often colored "in the mass" with lead pigments. Red articles are also most usually colored in mass, the pigment being antimony sulphide, which, however, being unattacked by the saliva may be considered innocuous. Gray rubber goods generally contain zinc oxide, and hence particularly when, as is sure to be the case, the toy is brought to the child's mouth, an element of danger is introduced. Superficial coloring is frequently accomplished by means of poisonous pigments. These remarks are applied in particular to foreign manufactures, and though, doubtless, the same coloring matters are used in this country, we have yet to learn of a case of poisoning from coloring in mass. Superficial pigments, from their disposition to flake and from the greater quantity brought into contact with the mouth, are certainly to be avoided. It is difficult, moreover, to estimate the amount of damage done by these toys owing to the many petty ills and derangements of infancy, the poison received by the child very likely is insufficient to develop well-defined symptoms or to direct suspicion, but at the same time may be the cause of an indisposition which itself brings on crying, wakefulness, and general wear on the little body struggling for existence.

The American medical editors will have a meeting and banquet in Washington on the evening of Monday, September 4, the day preceding the assembling of the Pan-American Medical Congress.

Dr. I. N. Love, of the *Medical Mirror*, 3642 Lindell avenue, St. Louis, has been appointed chairman of the committee of arrangements for banquet, which fact gives ample assurance of the success of the latter.

It is earnestly hoped that every medical editor of all of the Americas will endeavor to be present on the interesting occasion. Please address the chairman of committee of arrangements promptly.

# American Druggist and Pharmaceutical Record.

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*Liberal Committence to Club Agents.*

It would really seem as if we were at last to have an International Pharmacopœia. Active steps toward that end were taken at the International Pharmaceutical Congress, and the American Pharmaceutical Association has set aside the sum of \$1,000 as the nucleus of a fund to help defray the expense of compiling, publishing and distributing such a pharmacopœia.

The duty of detecting offenders against the pharmacy laws of the city and county of New York is, we believe, vested in the officers of the New York City and County Board. In all offenses against the sections relating to the dispensing of poisons and prescriptions in drug stores by unlicensed drug clerks the board exercises a commendable degree of vigilance, but we think its time might be well occupied at the present moment in inspecting dry goods bazaars where, we are informed on good authority, the sale of poison in the form of Sun Cholera and Squibb's Mixture is carried on by unqualified persons without restriction.

## THE NEW PHARMACOPŒIA.

A CORRESPONDENT calls our attention to a misprint in the new Pharmacopœia. H. H. FUNNELL, of FUNNELL & SONS, druggists and pharmacists, Huntington, L. I., writes:

"I have read with interest your editorial on the new Pharmacopœia, but note that you have adopted an error from the pharmacopœia itself in regard to the strength of infusions and decoctions.

In the table of comparative strengths of preparations the strength of infusions and decoctions is stated as 1 in 5 as you state it, whereas the formulas in the text of the book call for 1 in 20 or 5 per cent., a very marked difference.

The facts are as Mr. FUNNELL states them, but how

this error could have escaped the observation of the Committee of Revision it is difficult to say. Since the publication of the article we have received other communications, JOSEPH W. ENGLAND, editor of the *P. C. P. Alumni Report*, being the second of our readers to favor us in this way

## MEDICINE IN THE WEST.

PHARMACISTS, and especially those of the West in States where pharmacy laws are not regarded in the light of provident dispensations, are sometimes twitted with their lack of education. As for physicians, they are popularly supposed to be beyond reproach in all that concerns an ordinary English education. But that lingering remnants of the old herb doctor still exist is all too evident from the wording of a postal card which lately came into our possession.

That the postal card reached its intended destination is as much of a wonder as it is a compliment to the post office authorities. Here is the address:

To Aney Hole Sail Drugs,  
Philadelphia, Pa.

On the reverse side of the card appears the following singular specimen of orthography:

ILLINAIS, Aug. 21, 1893.

To aney responciabel Drug Store (Hole Sale) I have red an article by Dr Shawmaker stateing the medical Propities of powdered Kola. He says that it groes in affrica. It is a vegitubel I am desirous to give it a tryel our drugist say they cannot procaur it at St. Louis or Cicogo if it dos not cost very much and if you will trust my honer if you will send me an aunce by mail I will return money by first mail. But if it can be got in your city and you preterre to weight till I can send money please send price.

Yours truly, —M.D.

## OURSELVES.

HOWEVER much self-laudation may be deprecated we think that our readers may pardon us for calling attention to the energy and enterprise displayed by this journal in laying before them so full and accurate an account of the forty-first annual meeting of the A. P. A. so far in advance of any other pharmaceutical journal. So promptly have we done this in fact that we have no doubt that some of our enterprising contemporaries will save themselves the trouble and expense of procuring a separate report by reprinting the account from our columns.

The annual meeting of the National Wholesale Druggists' Association has been postponed from September 11 to October 9.

### AN IMPROVED SHAPE OR SUPPOSITORIES AND BOUGIES.\*

BY HENRY S. WELLCOME.

The use of suppositories as vehicles for medication and alimentation has undoubtedly greatly increased during the past few years, but it is a very remarkable fact that since their first introduction into pharmacy there has been scarcely any improvement in shape.

The ordinary cone shaped suppository which has so long done duty is easily inserted, but often more easily expelled, and this great defect has caused the most aggravating annoyance and disappointment to both physicians and patients.

When a suppository of the ordinary shape is introduced into the anus or fundament, the lower extremity of the great intestine, the pressure of the muscles which are peculiar to the *sphincter ani* act entirely with expelling force, unless the suppository is introduced a considerable distance into the rectum. Even then the *levator ani*, which serve to dilate and draw the anus up to its natural situation after the expulsion of the fæces, fail to grasp the suppository when introduced



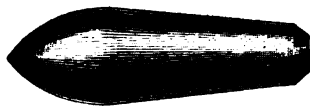
WELLCOME'S IMPROVED BOUGIE.

small end first on account of its unreasonable shape; in fact the old suppository has always been introduced wrong end first.

A double cone shaped suppository has been devised which is certainly an improvement over the ancient form, but this does not in all cases insure retention, as the double cone form only secures about equal division of the retaining and expelling force of the *sphincter ani*.

I have designed a suppository which I believe fully overcomes the difficulty; it is practically the reverse of the old shape. This improved suppository is formed with a thick bulb abruptly pointed at the apex like a fat cigar or minnie bullet, and gradually tapered to the base.

A forty-five grain cacao butter rectal suppository of this shape is one and a half inches in length and half an inch in diameter at the thickest portion, the thickest portion being half an inch from the apex and one inch from base. The base is one-quarter of an inch in diameter and is cut off transversely. The taper both to the apex and to the base has a somewhat bulbous curve, as shown in the drawing herewith, and by the patterns exhibited.



WELLCOME'S IMPROVED SUPPOSITORY.

This improved suppository is inserted with the thick bulbous head foremost, and by the reflex contraction of the *sphincter ani* not only is expulsion prevented, but the suppository is naturally held in position. The entire muscular force acts to retain and press inward.

These suppositories of my design have been tested in one of the principal London hospitals with unqualified success. I apply this same shape suitably modified for vaginal suppositories; also, with suitable modifications for urethral bougies—see drawings and specimens herewith.

Any pharmacist who desires to please the medical profession, and greatly benefit those for whom he dispenses—to say nothing of his own profit from enterprise—may by a small outlay procure molds for preparing suppositories of this shape from any mold maker; they are neither registered nor patented.

\* Read before the American Pharmaceutical Association, Chicago, 1893.

### New Bismuth Compounds.

Tribromphenol-bismuth has been recommended by Prof. Hueppe in a paper published in the *Berliner klinische Wochenschrift*, 1893, No. 7, as a specific against cholera. The new compound is described as a yellow, neutral, insoluble powder, destitute of odor and taste, nearly non-poisonous, indifferent to mucous membranes and the organs of digestion. It contains 49.5% of bismuth oxide besides 50% of tribromphenol. The daily dose for adults is 5 to 7 gms. ( $1\frac{1}{4}$  to  $1\frac{3}{4}$  drs.) given in single doses of  $\frac{1}{2}$  gm. ( $7\frac{1}{2}$  grns.). Tribromphenol-bismuth, it is said, possesses powerful bactericidal properties, probably uniting the cholera poison with the bismuth, and transforming it into a non-poisonous and non-absorbable substance, and it protects the denuded intestinal mucous membranes against the development of the cholera bacilli.

Betanaphthol-bismuth has also been designated by Hueppe as a most powerful intestinal antiseptic. It contains 80% of bismuth oxide. It is a neutral, brown, odorless, non-caustic powder, insoluble in water and decomposed into its component parts in the intestine,

the betanaphthol being absorbed and discharged with the urine, while the bismuth is evacuated with the stools. The dose is 1 to 2 gms. (15 to 30 grains).

Pyrogallol-bismuth is the most remarkable of these various bismuth-compounds. It has the advantage to resist the action of acids, while it dissolves in alkaline liquids, the intestinal juices more especially.

In a paper published in the *Archives des Sciences Biologiques*, Vol. ii., No. 2, Dr. M. F. A. Jasenski reports experiments made in Prof. Nencki's laboratory at the St. Petersburg Imperial Institute with phenol-bismuth, cresol-bismuth and betanaphthol-bismuth. From his conclusions we gather that when introduced into the stomach these agents are decomposed by the gastric juice into phenol, cresol or naphthol on one hand and bismuth on the other; some of the preparation which has not had sufficient time to be decomposed in the stomach, passes on into the intestine where the conditions are also favorable to its complete decomposition on account of the acid reaction of its contents and the presence of the pancreatic juice.

Phenol and cresol, after being separated from the bismuth, are absorbed completely by the intestine and eliminated with the urine in the form of sulphocarbolic or cresylic acid, or combined with glycuric acid; naphthol, on the other hand, is only partially eliminated with the urine, the remainder passing through the whole digestive canal and being excreted with the fæces.

In spite of the toxic properties of the phenols, etc., none of the three preparations had the least injurious effect, although they were administered for three weeks in daily doses of 5.0 gms. (75 grains) to man and of 10.0 gms. (150 grains) to dogs.

In Turkey, potassium chlorate being considered an explosive substance cannot be obtained except through a government gunpowder depot. When the pharmacist wishes to purchase any of this salt he must first obtain a permit. Having purchased it he is not yet free so he is not allowed to place it in the market as compressed tablets. A move is now on foot among the pharmacists of that country to secure a modification of the present regulations.

**Ink for Typewriter Ribbons.**

The best utensil for use in the preparation of typewriter inks is an ordinary gluepot; into this put some best quality petrolatum and melt it by standing the gluepot on a fire, then put in as much lampblack or powdered drop black as the petrolatum will take up without becoming granular; to effect this incorporation the black pigment should be put in a little at a time, and the whole thoroughly stirred while making the additions. You will have to be careful not to let the petrolatum remain in excess, for if you do the print is liable to have a greasy outline; while on the other hand, if the pigment be in excess, the print will not be clear.

When a proper mixture of petrolatum and pigment has been made, take the vessel from the fire, and while it is cooling mix equal parts of petroleum, benzine and rectified oil of turpentine, and in this mixture put the black petrolatum compound, mixing in a little of the other with constant stirring so as to effect a thorough combination, and the petrolatum compound becomes dissolved. The quantity of the volatile solvent should be sufficient to render the fluid ink of the consistence of oil paint; you will then have a good permanent black ink, which will not be rubbed off with water like aniline inks. For colored inks of this class use Prussian blue, red lead, chrome yellow, and for inks of the aniline class use these dyes dissolved in equal parts of pure spirit of wine and concentrated glycerin; thus for a black aniline ink dissolve one-half ounce of aniline black in 13 ounces alcohol and then add the glycerin. Ink the ribbon in the usual way. Having prepared the ink, proceed to ink the ribbon; the secret of success lies in the proper application of the ink to the ribbon, thus: wind the ribbon on a piece of cardboard, spread on a table several layers of newspapers, then unwind the ribbon in such lengths as may be most convenient, and lay it flat on the paper. Apply the ink, after well shaking it, by means of a soft brush, and rub it well into the interstices of the ribbon with a toothbrush. Hardly any ink should remain visible on the surface.

**HEKTOGRAPH INKS.**

No. 1.—Dissolve 1 oz. of aniline violet (methyl. violet 2 R.B. to 3 B.) in 7 fluid oz. of hot water, and when it has cooled mix in 1 fluid oz. of alcohol and  $\frac{1}{4}$  fluid oz. of glycerin, a few drops of ether and a drop of carbolic acid. Keep this ink in a well stoppered bottle to prevent ingress of air, as both spirit of wine and glycerin imbibe moisture from the air.

No. 2.—Make a strong aqueous solution of nigrosine (aniline black) in the proportion of about one of the coloring body to 5 or 7 of water.

No. 3.—Mix 1 oz. nigrosine, 15 oz. water, 4 oz. glycerin. If it is desired to make it copying, add more glycerin, gum arabic or sugar. The foregoing is gleaned from *The Stationery Trades' Journal*.

**Dragon's Blood.**

The origin of the name of this resinous compound is not definitely known. It is considered by many to refer to the liquor sanguinis of the dragon whose use preceded that of the vegetable pigment, but this has been greatly questioned by pharmacognocists. Probably the first mention of dragon's blood in medical literature, as we gather from an article contributed to the *Gardeners' Chronicle*, occurs in the *Historia Medicinale* of Monardes, published in 1569. In the French edition of Monardes, the *Histoire des Simples Medicaments apportés de l'Amerique* (1619), lib. v., cap. xxiv., we find it stated, as it probably is in the first edition to which we have referred, that the Bishop of Carthage had recently

brought home the fruit of the tree, whence exudes the tear (larme) which is commonly called Dragon's Blood. Now, this fruit, our author goes on to say, is every way admirable, for as soon as the rind is removed, quite suddenly a little dragon appears, elaborated with such natural artifice, that it appears as if sculptured in marble by some skilled workman. It has a rather long neck, the throat open, the backbone beset with spines, the tail long, and the feet well armed with nails. "Carthage," in Peru, is said to be the source whence the dragon's blood is derived, and its properties are described as highly astringent, and the drug is used in those cases where a medicament of that nature is required. Gerard, in his *Herbal* (1597), p. 1339, under the head of *Draco arbor*, the Dragon Tree, unblushing copyist that he is, gives the same figures, and a good description of the *Dracæna Draco*. The external appearance of the fruit is well described, and then it is further stated that there "is to be seene, as Monardus and divers others report, the forme of a dragon, having a long necke or gaping throat; the ridge or backe armed with sharpe prickles like the porpentine; it hath also a long taile, and fower feet, very easie to be discerned; the figure of it we have set foorth unto you according to the greatnes thereof, because our words and meaning may be the better understood." Gerard then, as Clusius had done before him, assigned the fruit with the dragon in it to what we now know as *Dracæna Draco*, although, as we have seen, Clusius is careful to say that he could not find any dragon in it. The *Dracæna* also offers a difficulty, inasmuch as it is a native of Teneriffe and Madeira. But Gerard is equal to the emergency, for he goes on to say of his Dragon Tree that "this tree groweth in an Iland which the Portingales call Madera, and in one of the Canarie Islands called Insula Portus Sancti, and as it seemeth it was first brought out of Affrike, although some are of a contrarie opinion and say, that it was first brought from Carthage in Nova Orbe by the bishop of the same province." In any case the sixteenth century botanists attributed the "dragon's blood" to the vegetable kingdom, but their far-off predecessors were less metaphorical in their notions. Pliny, for instance, in his *Natural History*, book xxxiii., cap. 40, says dragon's blood (which was used as a "vehicle" or as a pigment by artists) is a thick matter issuing from the dragon when crushed beneath the weight of the dying elephant. Elsewhere Pliny (book xxxv., cap. 32) speaks of India sending to Rome the slime of her rivers, and "the corrupt blood of her dragons," and this fact serves him as an illustration of a tendency which is apparent now as then. "Everything, in fact, was superior at a time when the resources of art were so much fewer than they now are. Yes, so it is; and the reason is . . . that it is the material, and not the efforts of genius, that is now the object of research." (Bohn's edition, vol. vi., p. 246.) The question to be solved is, what was the fruit mentioned by Monardes, and which contained so striking a verisimilitude to a dragon? A conventional dragon it must have been, like the effigy at Temple Bar, perhaps, for no one quite knows what a dragon was! What is known nowadays as dragon's blood is a resinous exudation used for varnish, and derived in some cases from a palm, *Calamus Draco*, in others from a *Dracæna*. Now, the palm has a scrambling stem thickly beset with spines, and its fruits are covered with hard scales turned down, and dragon-like as dragons are supposed to go, but the *Calamus* comes from Sumatra and Borneo, and not from Carthage. In spite of its name, it is rather difficult to see any resemblance to a dragon in a *Dracæna*. Perhaps the bayonet-like leaves may have suggested the idea.

# COLUMBIAN EXPOSITION

## MEETING OF THE SEVENTH INTERNATIONAL PHARMACEUTICAL CONGRESS.

### Preliminary Ceremonies.

The preliminary ceremonies attending the opening of the Seventh International Pharmaceutical Congress took place in the Hall of Columbus, Art Palace, Chicago, Monday, Aug. 21, at 10 A.M. At this hour the representatives of the various congresses convening under the general head of Science and Philosophy gathered together to hear addresses from President Bonney, of the World's Congress Auxiliary, and distinguished men of science. Upon the platform were prominent representatives of the sciences of astronomy, chemistry, electricity, pharmacy, zoölogy, psychology, including Ellisha Gray, the well known electrician, Professor Wiley, the eminent chemist, Prof. Oldberg and N. H. Martin, representing pharmacy, Prince Wolfsonski, of St. Petersburg, representing Russian science, and Professor Ganaki, of the Chemistry Department, University of Tokio, Japan.

President Bonney delivered an eloquent address to the congresses united together for the time being, in which he spoke about the marvelous progress made in all branches of science and philosophy during the past half century and its glorious future.

Following the conclusion of the opening ceremonies the representatives of the several congresses dispersed and proceeded to the various halls allotted to them by the World's Congress Auxiliary.

### FIRST SESSION.

The first session of the Seventh International Pharmaceutical Congress was called to order by Professor Oldberg, chairman of the committee on arrangements in Hall III. of the Art Palace at 11 A.M. Professor Oldberg called upon Professor Remington to make an opening address to extend a welcome to the delegates.

Professor Remington, in a brief speech, gave an account of how the Congress had been arranged to meet in Chicago, and its general objects.

Professor Oldberg next introduced Michael Carteighe, president of the Pharmaceutical Society of Great Britain, who made a short address in response.

The next business in order was temporary organization, and to effect this Professor Oldberg stated that Professor E. L. Patch had been selected as chairman pro tem.

Professor Patch took the chair. He announced that he would appoint a committee on credentials, and selected for this purpose Messrs. Wm. Martindale (chairman),

with all papers, and to present such as might be of interest. The members of this committee were Jos. P. Remington, Michael Carteighe and Wm. Martindale.

Delegates were present from all the State pharmaceutical associations of the United States and from the principal colleges of pharmacy. The following from Europe and Canada presented their credentials:

Belgium—Dr. M. E. Ramlot, of Brussels, representing the Royal Pharmaceutical Society of Brussels and the Pharmaceutical Society of Antwerp. Austria—Karl Fischer, representing the Deutsche Apotheker Association. Great Britain—Michael Carteighe, Wm. Martindale and N. H. Martin, of the Pharmaceutical Society of Great Britain. Sweden—Morten Neygaard. Swedish Apothecaries' Association of Christiana. Canada—S. W. Youman and J. H. Hall, of the Pharmaceutical Society of Ontario. E. Muir and S. Lachance and J. E. Morrison, of the Montreal College of Pharmacy. Australia—Thos. Ingham, of the Pharmaceutical Society of Queensland.

Visitors from foreign countries, not accredited delegates: Dr. Leo Egger, Vienna, Austria; M. Danielson, Stockholm, Sweden; Dr. M. E. Ramlot, Brussels.

### SECOND SESSION.

The second session of the Congress was called to order by Temporary Chairman Patch at 3 P.M., and the proceedings were opened with the reception of the report of the nominating committee appointed to select officers for the Congress at the first session.

Mr. Carteighe presented the committee's report, which was as follows: For president: Jos. P. Remington, Philadelphia. Vice-presidents: Austria, Karl Fischer; Belgium, M. E. Ramlot; Canada, L. W. Youman; Great Britain, Michael Carteighe, N. H. Martin and Wm. Martindale; Sweden, Norway, Morten Neygaard; Australia, Thomas Ingham.

These vice-presidents are non-Americans. The remaining positions in that office were filled by the nomination of the following: A. E. Ebert, Chicago; Dr. Rice, New York; L. E. Sayre, Kansas; S. A. D. Sheppard, Massachusetts; W. S. Thompson, of the District of Columbia; E. L. Patch, of Massachusetts. For secretary,



PROF. JOS. P. REMINGTON, PH.M., F.C.S.,  
President of the Seventh International Pharmaceutical Congress, and  
Vice-Chairman of the Committee of Revision of the U. S.  
Pharmacopœia.

Mr. Danielson, of Stockholm, Sweden; Carl Fischer, Gratz, Steinmark, Austria; A. Ebert, Chicago; and Wm. Simpson, Raleigh, N. C.

Morten Neygaard, of Sweden, at the request of the chairman, acted as secretary pro tem.

The chair appointed a committee on communications to examine communications addressed to the Congress, together

Oscar Oldberg, of Chicago; for vice-secretaries, S. Lachance, of Canada; T. P. Fennel, Cincinnati; M. E. Breslin, of Louisiana.

The committee's report was accepted, and then on motion of Mr. Rogers, the chairman pro tem. was instructed to cast a ballot for the nominees, and this having been done they were declared duly elected. The chair appointed Messrs. Martin and Carteighe a committee to conduct the president-elect to the platform.

President Remington having been introduced to the Congress briefly acknowledged the honor conferred in electing him to preside. Professor Oldberg responded as secretary. The Congress now being regularly organized, the general order of business was resumed.

President Remington announced that according to the programme the next matter before the Congress was the presentation of the Hanbury gold medal, awarded under the auspices of the Pharmaceutical Society of Great Britain, the Linnæan Society of London, the Chemical Society of London and the British Pharmaceutical Conference. It was to be presented by Mr. Carteighe as president of the Pharmaceutical Society of Great Britain.

Mr. Carteighe made a brief address. He stated that the Hanbury medal was founded about thirteen years ago by Daniel Hanbury, an English enthusiast in materia medica, who left a trust fund for the purpose, and directed the medal to be presented for extraordinary merit in the advancement of his favorite branch of science. The medal has been presented in only a few instances, and in these cases to men of world-wide reputation, Professors Flückiger, Planchon, Hesse and Dragendorff having received it. Lastly it had been awarded to Professor Malsch, of Philadelphia, as a recognition of his valuable services in the world of science. It was to emphasize this recognition that the president of the Pharmaceutical Society had come such a long distance to personally present the medal to Professor Malsch, which had unhappily been prevented through his sad illness.

Amid enthusiastic applause, Mr. Carteighe then presented the medal to President Remington for transmittal to Professor Malsch.

President Remington, who was visibly affected, touchingly referred to the honor conferred upon his friend and colleague, the greatest that could be received by any pharmacist. "When I left his bedside a few days ago," said Mr. Remington, "he was scarcely conscious, but at intervals he was able to take my hand, and it was hardly necessary to say any words. So when Mr. Carteighe, at the first session of the American Pharmaceutical Association, intimated that he had brought this medal and that it would be presented to Professor Malsch, fearing that Professor Malsch might pass out of the world without knowing of the honor that was to be conferred, I telegraphed at once to that noble woman, Mrs. Malsch, whom we all know and admire. I have since received a reply from the family, and I am sure you share with me the gratification at receiving the news that the circumstance is known to Professor Malsch.

President Remington announced that all the papers appertaining to the Congress had been carefully arranged by

Professor Malsch's son and daughter, who had forwarded them to Chicago, and he suggested that a committee be appointed to take charge of them, and present such of them to the Congress as might be found desirable. This course having been approved, a committee was appointed for the purpose, consisting of Messrs. Fennel, Bodemann and Patch.

Discussions being suggested by the chair upon motion of Mr. Sheppard, the following subject, appearing on the programme, was selected for debate: "What progress has been made toward the preparation of an international pharmacopœia for potent remedies? What action, if any, should be taken in reference to the subject?"

The chair remarked that Mr. Carteighe was well informed upon the subject, and having attended several of the former international pharmaceutical congresses was in a position to know what the views of foreign pharmacists were on this important question.

Mr. Carteighe, responding, said that at a



CHARLES RICE, PH.D.,

Vice-President of the Seventh International Pharmaceutical Congress, and Chairman of the Committee of Revision of the U. S. Pharmacopœia.

previous congress Dr. Anton von Waldheim, of Vienna, had been appointed chairman of a committee to prepare a draft of an international pharmacopœia, but that so far as he knew no action had yet been taken, so that it was open for the present Congress to take some steps in the matter if desirable. In his opinion, however, a pharmacopœia of international scope was not practicable, because no pharmacopœia could be framed to prescribe remedies for all nations, and which would be wholly unsuited to certain countries. In order for such a work to be practical it would have to be simply an encyclopedia and therefore impossible of compilation. For that reason pharmacopœias must continue to be national in character and vary accordingly, just as the national character of a human being would vary. Mr. Carteighe therefore urged the delegates in discussing the subject to consider whether in view of these facts it would not be better and more practical to publish, under the direction of an international committee, a supplement containing all the potent remedies in general

use in the principal countries of the world. The word "laudanum," for instance, is understood differently in different parts of Europe, and as the consumption of medicines of potent character is being enormously increased, the publication of a small volume of the kind referred to could not fail to be of benefit. Speaking for the Pharmaceutical Society of Great Britain Mr. Carteighe said that that body would be willing to contribute a reasonable sum toward the accomplishment of such a work.

Professor Whelpley called attention to the fact that at the second general session of the American Pharmaceutical Association, a resolution was adopted proffering the sum of one thousand dollars to the Congress for the purpose of compiling, publishing and distributing an international pharmacopœia, and this fund could probably be made available. (Applause)

Mr. Sheppard said that he had carefully read the proceedings of the various international pharmaceutical congresses held in past years, and had noticed that at several of the meetings this subject of an international pharmacopœia, or one covering potent remedies, had been discussed, and it seemed that the time was now ripe for action. For that reason, he had prepared a series of resolutions on the subject, which he would now present.

Mr. Sheppard then read the following:

*Resolved*, that a commission be employed by this Congress to compile and publish an international pharmacopœia, that this committee shall consist of one representative from each of the various countries represented in this Congress and from such other countries as may hereafter be determined.

*Resolved*, that a committee of five, of whom the president of the Congress shall be chairman, now chosen, and that said committee shall decide what other countries besides those here represented shall be invited to join in the work. The committee shall also determine how the members of the committee shall be appointed. *Resolved*, that this Congress accept the proffer of the American Pharmaceutical Association of the sum of one thousand dollars to help defray the expense of compiling, publishing and distributing an international pharmacopœia.

Before a vote was taken, Mr. Martindale, addressing the Congress, said that a universal pharmacopœia in respect to the strong preparations and galenicals is very desirable, and that it was possible if arranged by a commission as suggested, but the work should not be done hurriedly. The commission should endeavor whenever a country brought out a pharmacopœia to influence its authors to accept uniform strengths.

It must be remembered, however, with regard to Great Britain, that physicians there are very conservative, and would not accept innovations, especially among the older practitioners. The adoption of the metric system in England would be very beneficial if it could be done, but there were many difficulties in the way. There was no question, though, that the compilation of a pharmacopœia of potent remedies would be of great service to every civilized country and very acceptable.

Secretary Oldberg stated that a reference to the proceedings of past congresses showed that the subject of an international pharmacopœia was considered at all the congresses until the fourth, when the subject was dropped, because at the fifth the idea was considered chimerical and that the only thing possible was a pharmacopœia of potent remedies.

Mr. Sheppard's resolutions, having been seconded, were then put to a vote and unanimously adopted.

(To be continued)

## ECHOES OF THE MEETINGS.

Dr. Frank Woodbury, as chairman of the section on pharmacy and materia medica of the American Medical Association, made a bright and interesting address at the closing session. He wears gray on his head as well as elsewhere, as becomes a resident of the Quaker City, and is thoroughly appreciative of the good work done by Professor Remington toward bringing about more agreeable relations between physician and pharmacist.

Henry S. Wellcome, whose name and fame have traveled from the home of his firm at Snow Hill Building, London, literally to the ends of the earth, is an enthusiastic and clear headed worker, as is shown by the achievements of the firm. Mr. Wellcome is of medium size, fair haired, athletic of appearance and un-English in looks. As a member of the Lotos, Savage and Whitefriars clubs he is in close level with the brainy men of both America and England. He has long known Stanley, Narsen and other explorers, and has just perfected a lime juice tabloid, of which Narsen will carry a supply on his five years' sojourn in an ice pack. Mr. Wellcome also gave his personal attention to the fitting out of Lieut. Peary's expedition.

Michael Carteighe, president of the British Pharmaceutical Conference, stands firmly on his feet, his arms folded, his head thrown back, his fine shoulders squared, and his clear voice rings through the hall when he speaks. His gray-pointed beard, tightly buttoned close fitting gray coat and assured bearing would well befit the successful banker, while his easy courtesy is rather more French than English in effect.



MICHAEL CARTEIGHE, PH.C., F.C.S.,  
Vice-President of the International Congress,  
President of the Pharmaceutical Society of  
Great Britain, and Royal Commissioner  
to the Exposition.

M. Ramlot, of Brussels, who spoke in French to the assembled pharmacists at the Casino on Saturday evening, is short in stature, with brown round beard, looking rather like a South German.

Bonanji Pallarji Karanjia, of Canton, China, Furdoonja Doralyee Herpitkhursed, and E. C. Banatwala, of Bombay, three prosperous and polished Parsee merchants, accompanied and were notably prominent on the coaching excursion, by reason of the tall semi-turban, semi-cylinder, which their faith prescribes both for out and for indoor use.

Dr. Leo Egger, of Vienna, is of a type familiar in the larger cities of the northern United States, namely the cultured polished successful German. He is tall, robust, of fine presence, his hair, his pointed beard, and his face all partaking more or less of a ruddy hue, and he wears a light suit of the most fashionable Viennese cut.

Tom Ingham, of South Queensland, was also at the A. P. A. meeting. He is physically a type of the well-to-do Briton as we see him in books and on the stage; not tall, not thin, and not lacking color in his face.



WM. MARTINDALE, PH.C., F.C.S.,  
Vice-President of the International Congress, ex-  
President of the British Pharmaceutical  
Conference.

Wm. Martindale, he of the "Extra Pharmacopœia," has a fine head well set on a fine body. His full whiskers are black and white, so unevenly distributed as scarcely to be called gray. He stands high, physically as well as intellectually, and makes friends rapidly among his American colleagues. He is built on square lines from his head down to—well, I did not observe his feet.

Wm. Martin, of Newcastle, ex-president of the British Pharmaceutical Conference, is rather below the medium height, is well proportioned and wears a Vandyke beard of a sandy brown color.

On Monday evening the American Pharmaceutical Association tendered a reception to the Congress, at the Press Club rooms in the Schiller building, at which



HENRY S. WELLCOME, PH.G.

many of the prominent members of the A. P. A., as well as the foreign visitors to the Congress, were present.

Prof. C. S. N. Hallberg introduced the president of the Congress, Professor Remington, who formally welcomed the foreign visitors, acting as toastmaster. Professor Hallberg then called on Mr. Ramlot, of Belgium, who (speaking in French) congratulated the pharmacists of America on having adopted the metric system, this being a most important step toward internationalizing pharmacopœial preparations, etc.

Dr. Leo Egger, of the Vienna *Pharmaceutische Post*, spoke in German for Austria, saying that his fellow countrymen generally had distorted and in many cases unjust ideas as to America and the Americans. These impressions, said Dr. Egger, he would feel it his duty and pleasure to endeavor to correct, for since he first set foot on American soil some weeks previous he had received the most convincing evidences not only of the hospitality of the American people but of their sterling worth.

Dr. Fred. Hoffman, of New York, then spoke and was followed by Michael Carteighe, president of the British Pharmaceutical Society and Royal Commissioner from Great Britain to the Exposition. Mr. Carteighe spoke in a most happy vein and most hopefully of the good to follow the efforts toward unifying the pharmaceutical standards of the world.

Thomas Ingham, of New South Wales; Wm. C. Alpers, Geo. J. Seabury, of New York; Henry S. Wellcome, of London, England; Prof. Remington, Judge Blakely of The Dalles, Oregon, and others made brief addresses, each being appropriately and most wittily introduced by Toastmaster Hallberg, whose tact and wit in conducting the reception were especially to be commended.

Caswell A. Mayo,

### National Wholesale Druggists' Association.

DETROIT MEETING, OCTOBER 9-12, 1893.

The committee of arrangements of the N. W. D. A. have issued a circular letter regarding the approaching meeting at Detroit, which it may be observed has been postponed from September 11 to October 9.

The programme as at present suggested by many members and outlined by the committee is to leave New York Saturday afternoon or evening, October 7, spending Sunday at Niagara Falls, and going on to Detroit Monday morning, arriving about 1.30 P.M. On Friday, October 13, the party will proceed to Chicago.

On account of the financial stringency the committee are expected to arrange for a first-class excursion on the most favorable terms, and, as much lower rates are probable in the near future, full details will not be announced until the latter part of September.

Many names have already been sent in, but as the cost of this excursion will depend upon the size of the party, delegates, members, their families and friends, who wish to go, *should send in their names at once* to the chairman of the committee. Any of the party who wish to go direct to Chicago without stopping off at Detroit, can do so. Those who wish can proceed direct to Chicago and stop at Detroit or Niagara on the return trip. Tickets will be good to return on all regular trains until October 31. If the party is of sufficient size a special train and other important advantages will be secured.

Members and visitors from other sections, who do not find it convenient to start from New York, are cordially invited to join the delegation on the way or meet us at Niagara and proceed with the party to Detroit and Chicago. First-class hotel accommodations will be arranged for at Niagara at specially low rates.

### The Apollinaris Spring.

The Duchess of Teck and suite, who are staying at Bad Neuenahr, visited the neighboring Apollinaris spring on Friday last. Her Royal Highness was conducted through the premises, and was interested in watching the various operations of filling, corking, labeling, and packing, the Apollinaris natural mineral water. The Duchess was much impressed with the very large amount of carbonic acid gas contained in the spring, and proceeded for a few steps toward the sunken courtyard in which the spring issues from the ground, in order to experience the effect of the gas, and afterwards caused her son, Prince Alexander, and her suite to do the same in order to convince themselves of the volume and density of the carbonic acid gas there accumulated.—*St. James Gazette*, Aug. 14, 1893.

The Executive Committee of Northwestern University School of Pharmacy (Illinois College) elected W. A. Dyche successor to the late D. R. Dyche. Wm. Bodemann has been elected chairman of the executive committee of the college in place of his late friend, D. R. Dyche, who, it will be remembered, held this office as well as committeeman on the International Pharmaceutical Congress.

### New Steam Vaporizer.

Whitall, Tatum & Co., manufacturers of druggists', chemists' and perfumers' glassware, 46-48 Barclay street, New York, are introducing a new vaporizer of the design illustrated herewith. The instrument is of brass, presents a neat appearance and is well adapted for the application of warm medicated vapors in the treatment of the throat, lung and nasal passages. In the Supplemental Price List for 1893, just published by Whitall, Tatum & Co., the new vaporizer is described under the head "W. T. & Co., No. 3 Steam Vaporizers." Druggists who desire copies of the price list should write to Whitall, Tatum & Co., mentioning this paper.



W. T. & CO. NO. 3 STEAM VAPORIZER.

### Hance Brothers & White's Advertisements.

Hance Brothers & White, manufacturing pharmacutists and chemists, Philadelphia, have spent much time and money in the effort to impress upon druggists the necessity of serving good soda water. Their advertisements possess more originality of construction and design than is ordinarily to be found in the advertisements of manufacturing pharmacists, yet it has happened that persons (and persons of discrimination and good taste, too) have failed to catch the drift of their announcements. *The Journalist* of Boston, for example, is quite at a loss to understand what prompted Hance Brothers & White to insert the advertisement which appeared recently in the different drug journals under the head "Sody-Wotter Noncents." Our contemporary reproduces the advertisement in its entirety and characterizes it as "stuff" and a poor sample of advertising. Hance Brothers & White have a word to say on the subject themselves, as will be seen from the letter which we print below:

*To the Editor:* We thank you for your courteous invitation to answer in your columns the strictures of *The Journalist* on our recent advertisement

"Sody-Wotter Noncents." *The Journalist* quotes a part of it and calls it all stuff. We call it "nonsense" ourselves, and can't well object to "stuff." However, it may be useful to tell why we pay trade papers for printing "stuff" and "nonsense" for us.

We have been teaching how to make money on soda water and by soda water for years, and it gets monotonous, as the boarder explained to his landlady when she asked him if he didn't like liver: "Oh yes, for fifty or sixty meals, but not for a steady diet." So we turned round and taught for once the contrary of twenty or thirty "directions" for making and selling soda.

We have heard of an edition of the Bible in which the "not" is omitted from the seventh commandment—accidentally of course—and that a Bible of that edition commands an extraordinary price, it being known to connoisseurs as *The Wicked Bible*. We should almost be willing to have our advertisement called *The Wicked Advertisement*, if we could give it such "go" in proportion to circulation.

It is true that there are twenty or thirty points to regard in making soda water. Most druggists (almost all confectioners and all the still worse street vendors of soda) think there are only three, viz., that it must be (1) wet, (2) sweet, and (3) have some sort of what they call flavor. We differ, you see, from the common opinion of the trade. We think soda ought to be very cold, as cold as one can make it with plenty of ice; we object to flies in it; slops on the counter, wet rags, etc.; cloudy glasses; thick glasses; impudence—there are lots of ways to make soda not quite right. The practice of usual soda-dispensers is to combine a good many of these wrong ways. Our notion is that it pays to combine the good ways. But there is nothing in this world that is harder to do, or that takes more faith than to make a neat housewife out of a slattern; and it is almost as hard to make an acceptable soda-water maker and seller out of a druggist who lacks the instinct to do the twenty or thirty things that have got to be done before he can make his \$10 to \$20 a day on soda, according to where he is. The difficulty lies in the facts that the not neat housewife thinks she is neat, and the low-toned druggist thinks his notions are "high enough for people round here."

We have held up these twenty or thirty facts in the making and selling of soda almost every month for several years; we have put them in different language and lights, illustrated them, debated them, scolded, begged, and got tired.

We suppose we have done a heap of good to the trade; we know we have sold a great many carloads of fruit juices. Of course, we believe that every customer follows directions. Average soda ought to be good by this time; perhaps it is; perhaps we have got the bulk of the trade in sodawater flavors. We ought to have more faith, very likely. May be it is absurd to go on teaching what everybody has learned, and advertising for trade that we have got already.

It has never occurred to us before that we were ourselves the unbelievers. We got in the habit of thinking there were a lot of reasoning druggists—we haven't bothered confectioners and circus sideshow soda-waterers—who hadn't come to our ways of making their soda fine and of making their fortunes with it. "This," to quote from Ward "is a goak."

Soda is so much more than soda; it is so important; it brings so much trade or turns it away. We have been so impressed with its value to druggists that we have left nothing undone to enable them to get the utmost out of it. That inverted advertisement was a sort of climax of seriousness in our advocacy of making sodawater as fine as it can be made and of selling it as acceptably as it can be sold.

The Philadelphia *Ledger* uses little newspaper cuts in some of its small advertisements. Once the cut of a couple dancing got turned wrong side up in a dancing master's advertisement. The dancing master wrong his hands and tore his hair; he was "ruined." That day another dancing master wanted his cut 't' other side up.

We can't all think alike. If the advertisement was a bad one, we hope the apology for it is a good one.

Yours truly,

HANCE BROS. & WHITE.

### Druggists and the Sale of Liquors.

The remarks of Alphonse Major at the recent meeting of the A. P. A. with reference to saloon druggists were without doubt illtimed and clumsy, but they may have been prompted by the perusal of a postal card such as the one we reproduce below, and if so, his offense will appear less heinous;

G. P. CRABTREE,  
DRUGGIST AND PHARMACIST,  
708 Commercial Avenue,  
CAIRO, ILL.

Dear Sir: I am now located in Coffee's Old Stand, No. 708 Commercial avenue, near Eighth street, and in connection with my drug stock, which is complete and fresh, I have in store a supply of Old Kentucky whiskies, which I think is very fine. I also keep a supply of Robinson County, Tenn., whisky on hand. A full assortment of fine wines and brandies for medicinal use my specialty.

When you come to Cairo I would be pleased to have you call in and see my store and sample my liquors. If satisfactory, would like to share your patronage in the future.

Respectfully,  
G. P. CRABTREE.

## NOTES ON PRICES.

## PACKAGE PRICES.

William H. Raser, drug broker and commission merchant, 32 Platt street, New York, in his prices current dated August 23, observes that there has been a slight improvement in trade during the week past, but orders are mostly limited to current wants and there is consequently little of interest to note. The depression in opium continues; single cases of pure drugs can now be had at \$2.25 and broken lots at \$2.30. In five or ten case lots \$2.20 cash would no doubt be accepted by some holders. Pure powdered opium \$3.20, and in 25 or 50 lots probably \$3.15 would buy. Morphine, P. & W.  $\frac{1}{8}$ s, offers at \$2.20. Quinine is dull and unchanged. Foreign bulk is jobbing at  $17\frac{3}{4}$  @  $18\frac{1}{4}$ c. as to brand, quantity, etc. In lots of 1,000 or more it can be had at  $17\frac{1}{2}$ c. cash. While for a round lot of say 5,000 or 10,000 ozs or more there are some holders who would doubtless accept 17c. cash "on the nail." Acid, Citric, is available at 45c and probably at  $44\frac{1}{2}$ c. in five keg lots. Acid, Tartaric, powdered, at 23c. Cream Tartar, powdered, at 19c. f.o.b., and contracts for round lots it is said could be placed at  $18\frac{1}{2}$ c. with protection. Chlorate Potash offering lower here. Acid, Oxalic, easier at 6c. in case lots and  $6\frac{1}{2}$ c. for single packages. Carbonate Ammonia, domestic, in bbls. at  $7\frac{3}{4}$ c. Red Arsenic lower at  $5\frac{1}{2}$  @ 6c. Blue Vitriol easier. Naphthaline balls  $4\frac{3}{4}$ c. and in ton lots at  $4\frac{1}{4}$ c. Trieste Cuttle Bone in straps at 11c., most holders asking 12c. Shellacs have further advanced in face of dull market.

Camphor, outside lots are pressing on the market and prices are rather demoralized. Canary Seed, Smyrna and Sicily, both have declined. Dutch Canary and California Mustard Seeds are lower. Spermaceti declined to 27 @ 28c. for block and cake. Japan Wax from 8c. with a higher tendency; round lots, say ten cases, may yet be had, however, at  $7\frac{3}{4}$ c.; nice fair grades Tinnivelly Sennas offering at 8 @ 10c. as to selection; poorer grades for less, and —choice at 12 @ 13c. Prime Angostura Tonka Beans as wanted, at \$1.75; less for larger lots, say 100 pounds. Sanderson's Oil Lemon, Bergamot and Orange, as well as other brands, are lower. Quicksilver is lower. Singapore Pepper is advancing. Cloves easier, but most other spices firm with a hardening tendency.

## German Rose Water.

Fritzsche Brothers, 34 Barclay street, New York, branch of Schimmel & Co., Leipzig and Prague, announce that the first shipment of German rose water, concentrated, from the new crop of roses, 1893, has arrived per steamship Rhaetia.

The rose water of this season is referred to as the product of the new and completely equipped factory which Schimmel & Co. have erected for this special purpose in the midst of its rose fields at Miltitz, near Leipzig.

The point is made by Fritzsche Brothers that the freshly gathered roses are immediately brought into the stills, thus allowing no time for fermentation or other deleterious changes to ensue. By this means a product is obtained which not only has the highest degree of strength, but which also possesses in the greatest purity the delicate fragrance of the fresh rose.

German rose water, concentrated, is put up in carboys holding  $6\frac{1}{2}$  gallons, and is quoted in original packages at \$1.00 per gallon, inclusive of package.

## Review of the Wholesale Market.

NEW YORK, August 30, 1893.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

The bulk of business in the market for drugs, dyestuffs and chemicals has been limited during the week under review to small and unimportant transactions, there being still an absence of important demand for the numerous lines of this department. As regards prices, about the usual number of changes have occurred, with buyers having slightly the advantage in the fluctuations that are recorded. Among the articles which have advanced in price or are firmer are: Apioi, Mexican Sarsaparilla, Pilocarpus, leaves and alkaloid, and Rose Oil.

## DRUGS.

ACETANILID in bulk continues to offer at 38c., but the demand is light.

ALCOHOL continues in good consumptive demand at previous prices.

APIOL has advanced to \$6.50 from importers' hands.

ARNICA FLOWERS continue in moderate jobbing demand with numerous small sales at 10 @  $11\frac{1}{2}$ c. as to quality.

BALSAM FIR, Canada, has been attracting some attention during the week and extremely low prices have been quoted in primary markets. Here there appears to be no disposition to shade \$2.45, which represents the nominal spot price.

BALSAM PERU has been in fair steady demand and we are reported sales of 300 lbs. True, for consumption, at \$1.35.

BALSAM TOLU is held at 23c. with sales reported of 40 cases for export supposed to be at about this figure.

BARKS.—Cascara Sagarda is without improvement. Supplies are offered at 7 @ 8c. as to quality, but the demand is slight. Buckthorn is held at 10c. Soap is in good supply and offers freely at  $3\frac{1}{2}$  @ 4c. for whole, and 4 @  $4\frac{1}{4}$ c. for cut and ground as to quantity.

BUCHU LEAVES are inactive though there is no urgency to realize at anything below previous quotations.

CACAO BUTTER, Dutch, is sustained at about 34c., though we hear of sundry large transactions on the basis of 32 @  $32\frac{1}{2}$ c.

CANTHARIDES continue extremely dull, though prices are without quotable change.

CASTOR OIL is attracting more attention with a good consumptive demand at manufacturers' prices. Best grades are quoted  $14\frac{1}{2}$  @ 15c. for bbls. and 15 @  $15\frac{1}{2}$ c. for cases.

CHAMOMILE FLOWERS, German and Roman, are steady and held at about previous prices. We quote best Roman at 24c. and German at 18 @ 25c.

COCA LEAVES have been inquired for and among recent sales are included 300 pounds Truxillo at 15c.

COD LIVER OIL is fairly active at \$18.75 @ \$22.50 as to brand.

CUBEB BERRIES continue quiet at 27 @ 30c. as to quality.

CUTTLE BONE, Trieste, is yet offered at  $11\frac{3}{4}$  @ 12c., though only jobbing parcels are selected. Other kinds are offered as low as 11c.

DAMIANA LEAVES have been in request at 27c., a few export orders being accepted at this figure. The range is quoted at 25 @ 27c.

DOGGRASS has been in better request of late and among recent transactions are reported sales of 2,000 pounds on private terms. The nominal quotation is  $5\frac{1}{2}$ c.

ERGOT is dull and unchanged. Values are weakening here in sympathy with advices from primary sources, though the quotations of the market are unchanged from nominally 40c.

JABORANDI LEAVES are very scarce and prices are hardening. We are reported a sale of one bale at 45c. For a single bale remaining 50c. is now asked.

LUPULIN has been inquired for to some extent during the week and sales have been making at 48 @ 70c. as to quality.

MANNA continues in light demand at \$1.25 for large flake, and small at 40 @ 42c.

MENTHOL is firmer and less freely offered. \$3.70 appears to be the general asking price.

MORPHINE, P. & W., is in better demand at \$2.15 @ \$2.20 in eighths.

MARJORAM, prime green, has been inquired for and sales of 10 bales at  $12\frac{1}{2}$ c. are reported.

NAPHTHALINE is slightly easier with flake now quoted  $3\frac{1}{2}$ c. and balls  $4\frac{1}{2}$ c.

OPIMUM is still in an unsettled condition, the indefinite information to hand regarding the growing crops serving with the present stringency in money to keep back active speculation. Single cases continue to offer at from \$2.20 @ \$2.25. The price for jobbing lots is still \$2.25 @ \$2.30, but the transactions at this range are few and unimportant. Powdered is maintained at \$3.30.

PEPPERMINT LEAVES, German, are held with increased firmness, due to reports of unfavorable crops abroad. The nominal quotation stands at 75c.

QUININE continues in good consumptive demand with numerous jobbing sales at  $17\frac{3}{4}$  @  $18\frac{1}{4}$ c. For quantity lots of say 5,000 ounces even money would be accepted. There is little doing upon this basis, however, as buyers are not disposed to branch out beyond immediate necessities.

SAFFRON, American, is well sustained at 25c. and a fair jobbing business is reported at this figure.

SUGAR OF MILK, powdered is in good request and numerous sales are making at the range of 12 @ 14c. as to brand and quantity.

## DYESTUFFS.

CUTCH has shown no animation during the week though the market is maintained steadily at the point of  $4\frac{1}{4}$  @  $4\frac{1}{2}$ c. for S. M. as to quantity.

DIVI DIVI is dull, though nominally steady at \$45 @ \$55 as to quality.

GAMBIER is dull with prices nominally unchanged. Sales are making at  $3\frac{1}{4}$  @  $4\frac{1}{4}$ c. as to quantity.

MADDER is scarce and it is doubtful if less than 12c. would be accepted.

NUTGALLS are without change at previous prices.

SUMAC is given very little attention. Sicily held at \$72.50 @ \$77.50 and Virginia \$43 @ \$47.50.

## CHEMICALS.

BLEACHING POWDER is in steady fair request, sales being made within the range of  $2\frac{1}{4}$  @  $2\frac{1}{2}$ c. for English as to quantity and German nominally 2.05c.

BLUE VITRIOL meets with only limited inquiry, but is steadier, offers to sell not being made below  $3\frac{1}{2}$  @  $3\frac{1}{2}$ c.

BRIMSTONE, best seconds, is dull and without features of interest. Spot is quoted  $\$18$  @  $\$18.50$  and shipments  $\$17.50$  @  $\$18$ .

CAUSTIC SODA is firmer with 70 and 74 per cent. held at  $\$2.80$  @  $\$2.87\frac{1}{2}$  as to quantity.

CHLORATE OF POTASH is dull and inactive with the quotation remaining at  $14\frac{1}{2}$ c. for crystals.

CITRIC ACID is firm at manufacturers' prices. We quote bbls.  $44\frac{1}{2}$  @  $45\frac{1}{2}$ c. and kegs 45 @ 46c.

CREAM TARTAR is passing out in jobbing quantities on the basis of  $18\frac{1}{2}$ c. for crystals in casks and 19c. for powdered in barrels.

NITRATE OF SODA continues dull and depressed, though without quotable change in price. We quote the range at  $\$1.65$  @  $\$1.75$  as to quantity.

OXALIC ACID is not inquired for to any extent. The general asking price is  $6\frac{1}{2}$  @  $6\frac{1}{2}$ c.

QUICKSILVER has advanced in London, the revised quotation reading  $\text{£}6$  7s. 6d. Here it is given very little consideration, only a moderate business being reported at 50 @ 52c.

SAL SODA is meeting with a moderate sale at previous prices.

TARTARIC ACID is moving slowly at  $22\frac{1}{2}$ c. for crystals and 23c. for powdered.

#### ESSENTIAL OILS.

ANISE is generally held at  $\$1.37\frac{1}{2}$  @  $\$1.40$ , though occasional business is reported down to the point of  $\$1.35$ . The demand, however, is limited.

CASSIA is steady at 75 @  $77\frac{1}{2}$ c., but the trade requirements are light.

CUBBS is still offered at  $\$2.35$ , though purchases are confined to small and unimportant quantities.

LEMON AND ORANGE are steady at the recent decline.

PEPPERMINT is passing out in fair quantities at the previous range, HGH being purchasable at  $\$2.60$  and bulk at  $\$2.40$  @  $\$2.55$  as to quality.

ROSE, Ihmsen's, is firm at  $\$7.50$  @  $\$8$ , the inside piece being for second-hand lots.

SASSAFRAS continues to offer at 36 @ 38c. for pure and 25 @ 27c. for artificial, though the stock on hand is light.

#### GUMS.

ALOES remain quiet without, however, any quotable change in value.

ASAFTIDA is moving in a slow way, though steady in price. One sale of 1,500 lbs. Calcutta is reported at 18 @ 22c.

CAMPHOR continues unsettled. A number of parcels still offering from second hands which are being cut from two to three cents per lb.

CHICLE continues inactive with the quotation nominally 29 @ 30c.

GAMBOGE, GUAIAC, KINO and SENEGAL are without important change.

ARABIC, 1st and 2d picked, has been reduced to 50 @ 55c. and 36 @ 40c. respectively.

SENEGAL, 2d picked, is lower, importers now quoting 28 @ 31c.

TRAGACANTH is quiet, but without quotable change.

#### ROOTS.

ACONITE, ALKANET and ALTHA are held at full previous prices, though trade requirements momentarily are small.

GINGER, unbleached Jamaica, is firmly held at 13 @ 16c. as to quality and jobbing sales are reported at this range.

GINSENG is less actively inquired for; small sales at  $\$1.75$  @  $\$2.75$  as to quality.

IPECAC continues held at  $\$1.27$  @  $\$1.30$ .

JALAP does not offer below 21c. from importers. From jobbers 22 @ 24c. is asked.

PODOPHYLLUM has sold down to 3 @  $3\frac{1}{2}$ c., several thousand pounds having been purchased for export at this range.

SARSAPARILLA, Mexican, is held with in-

creased firmness,  $9\frac{1}{2}$ c. being now regarded as an inside price.

SENEGA, new crop, Minnesota, is offering with increased freedom, and quotations for spot goods are lower, 36c. being quoted as acceptable.

SNAKE is dull, but the available stock here is held at the limit of 20 @ 22c. for Texas.

SQUILLS are meeting with a moderate sale and 5 @  $5\frac{1}{2}$ c. is being realized for prime white.

RHATANY has been in demand lately, recent sales including 2,000 lbs. at  $6\frac{1}{2}$ c.

#### SEEDS.

ANISE is held at full previous prices.

CANARY is selling moderately at  $2\frac{1}{2}$  @  $2\frac{1}{2}$ c. for Smyrna.

CARAWAY, Dutch, has advanced, the general asking price being  $6\frac{1}{2}$  @ 7c.

CELERY is held at 11 @  $11\frac{1}{2}$ c. and the market appears to be hardening.

CUMMIN does not offer below  $9\frac{1}{2}$ c.

FENUGREEK has been passing out in moderate quantities to consumers at  $2\frac{1}{2}$  @  $2\frac{1}{2}$ c.

HEMP is quiet at nominally unchanged values.

MUSTARD, California yellow, is held on the coast at  $3\frac{1}{2}$ c. f.o.b. Brown is quoted 3c., and considerable business has been done at these figures.

Professor Markoe, of the Massachusetts College, occupies the cottage of the late John Boyle O'Reilly, at Hull, Mass., and was the subject recently of an article in the Boston *Record* which was complimentary enough to state that if Hull had a few more residents like Prof. Markoe, the place would be made a perfect fairy land.

John T. Mayo, of the firm of Mayo, Weaver & Sykes, wholesale druggists, Columbus, Miss., brought his World's Fair trip to a pleasant end by a short sojourn in New York City, where he has been attending to various matters of business and personal interest during the past week.

## Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted free of charge. Write distinctly, on one side of paper only, and do not use postal cards.*

### POSITIONS VACANT.

A representative for North America, also one for South America is wanted by a chemical pharmaceutical manufactory in Berlin. Address offers to I. G. 6572, care Rudolf Mosse, Berlin, S. W. (Germany).

LICENSED CLERK wanted speaking English and German fluently; sleep on premises; coffee in A.M.;  $\$15$ ; good references. Address "Halsey," care of AMERICAN DRUGGIST, 37 College place, New York.

### POSITIONS WANTED.

SITUATION WANTED by a clerk speaking German, Hungarian, Roumanian, French and Polish; six years' experience principally as prescription clerk; best of references; salary moderate to begin on. Address William Paikert, care M. Marculescu, Delancy and Orchard streets, New York City.

WANTED—Situation, drugs; a bright junior with 4 years' experience in a first-class pharmacy desires to make a change. "Apioi," 1153 Broadway, Brooklyn.

POSITION WANTED by September 1; competent clerk (21) desires a permanent position in the country, New England States or New York; willing and obliging;  $4\frac{1}{2}$  years' experience; At references as to general character; salary  $\$14$ ; Edward C. Bell, Far Rockaway, Queens Co., L. I.

POSITION WANTED—By a licentiate of New York City board who has had experience in Ireland; will accept small salary to commence with; good references. Address Wm. Costello, care of AMERICAN DRUGGIST, 37 College place, New York.

SITUATION WANTED by graduate outside N. Y. City or Brooklyn; 8 years' experience; married; only those wanting a first-class man need answer. "Reliable," care of AMERICAN DRUGGIST, 37 College place, New York.

WHOLESALE.—A retail drug clerk of twelve years' experience is desirous of situation in a wholesale drug house; can furnish best of references. Address "T. L. P. F.," care of AMERICAN DRUGGIST, 37 College place, New York.

WANTED—Position by Ph. G., 24 years old, with six years' experience in retail drug business; well up in all branches of retail pharmacy, pharmaceutical assaying and analytical chemistry; strictly temperate and moral; for a good paying and permanent position would go to any part of the U. S. Address care AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD.

POSITION WANTED by a manufacturing chemist; a large and thorough experience with pharmaceutical and chemical preparations; satisfactory reference given. Address "Chemist," care of AMERICAN DRUGGIST, 37 College place, New York.

GRADUATE, 7 years' experience, age 25, desires situation in West or Northwest; English and German; best references; state salary. I. B. Lutz, Blainesport, Pa.

GRADUATE OF N. Y. C. P. wants position as clerk in good drug store (Southern N. Y. or Northern Penn. preferred); will be open for engagement Sept. 15; "A," references. Address "C. D. B.," care of A. J. Pratt, Westville, Otsego Co., N. Y.

WANTED—Position pharmacist; registered in Minnesota; salary  $\$75$ ; best reference. Address "Druggist," Crook's Pharmacy, W. Duluth, Minn.

POSITION WANTED in Brooklyn by junior clerk; 6 years' experience, with college privileges this Fall. Address "Senega," care of American Druggist, 37 College Place, N. Y.

### BUSINESS OPPORTUNITIES.

FOR SALE.—We have for sale a large number of drug stores in various parts of the country. Before buying consult us. No charge to purchasers. The Pharmaceutical Exchange Bureau, 1501 Arch St., Philadelphia, Pa.

DRUG STORE in Jersey City; net profits  $\$1,800$  per year; will take  $\$1,800$  cash; rare bargain; satisfactory reason. "Pepain," AMERICAN DRUGGIST, 37 College place, New York.

*Clerks and Employers should call at this office, register their wants and examine our list of POSITIONS WANTED POSITIONS VACANT and BUSINESS OPPORTUNITIES, which can be consulted free of charge.*

*Kindly mention this Journal when writing to Advertisers.*

# ORIGINAL PACKAGE PRICES.

It should be understood that the prices quoted in this column are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a considerable range of prices.

## Drugs, Chemicals, &c.

|   |   |   |   |
|---|---|---|---|
| Acetanilid, bulk, per lb. .38 @ .47                 | Codine, eights. .4.65 @ . . .                 | Nux Vomica, lb. .03 1/2 @ .04                   | Cardamon, Malabar, per lb. .75 @ .85                  |
| " lb., per lb. .38 @ .47                            | Cod Liver Oil, Norwegian, bbls. 18.50 @ 22.50 | Nutgalla, China, per lb. .13 @ .13 1/2          | Colchicum, lb. .15 @ .15                              |
| " oss., per oz. .06 1/2 @ .06 1/2                   | Colocynth. .30 @ .38                          | Aleppo, per lb. .13 1/2 @ .14                   | Coriander, lb. .06 1/2 @ .07 1/2                      |
| Acetate of lime: .06 1/2 @ .06 1/2                  | Trieste, lb. .30 @ .38                        | Oils, Essential: .13 1/2 @ .14                  | Cumin, lb. .11 @ .12                                  |
| Brown, per 100 lb. .90 @ .95                        | Spanish. .20 @ .28                            | Anise. 1.35 @ 1.40                              | Fennel, Germ. lb. .11 @ .12                           |
| Gray, per lb. .01 1/2 @ .01 1/2                     | Copperas, per 100 lb. .75 @ .90               | Almonds, Bitter. 7.50 @ . . .                   | Flax Meal, per lb. . . @ . .                          |
| Acids: .01 1/2 @ .01 1/2                            | Cr. Tartar, Crystals, lb. .18 1/2 @ .20       | " Sweet. .80 @ .43                              | Foenugreek, lb. .06 1/2 @ .07 1/2                     |
| Acetic Com'l. .01 1/2 @ .02                         | Powdered, lb. .19 @ .20 1/2                   | Bergamot. 2.00 @ 2.75                           | Hemp, Russian, lb. .06 1/2 @ .07 1/2                  |
| Aquafortis, 36 deg. .03 1/2 @ .03 1/2               | Cubeb Berries, XX, lb. .27 @ .30              | Cajeput, Native. .45 @ .55                      | Mustard, yel. Cal. lb. .06 1/2 @ .07 1/2              |
| " 40 .03 1/2 @ .04 1/2                              | Ordinary, lb. .22 1/2 @ .25                   | Camphor. .07 @ .08                              | Mustard, brown, Cal. lb. .06 1/2 @ .07 1/2            |
| Benzoic, German. .47 @ .54                          | Cutch, bales, SM, lb. .04 1/2 @ .05           | Cassa. .75 @ .80 1/2                            | Poppy, per lb. .07 1/2 @ .08 1/2                      |
| " English. .09 @ .09 1/2                            | Cutch, boxes lb. . . @ .09                    | Citronella, Native. .24 @ .28                   | Quince, German, lb. .41 @ .50                         |
| Boric, Whole. .13 1/2 @ .14                         | Cuttle bone, Trieste, lb. . . @ .12           | Clove. .52 1/2 @ .55                            | Rape, German, lb. .03 1/2 @ .03 1/2                   |
| " Powdered. .13 1/2 @ .14                           | Jewellers' lb. .35 @ . .                      | Copaiba. .70 @ .75                              | Rape, English, lb. .05 1/2 @ .06                      |
| Citric, American. .45 1/2 @ .46                     | Dextrine. .04 1/2 @ .05                       | Croton. .75 @ .80                               | Soap, Castile, Mars, mottled, pure, lb. .06 @ .06 1/2 |
| " English. .45 1/2 @ . .                            | Divi Divi, per ton. 45.00 @ 55.00             | Cubeb. 2.50 @ 2.60                              | White, lb. .09 1/2 @ .10                              |
| Carbolic Crystals. .13 1/2 @ .17 1/2                | Dragon's B'd, lump, lb. . . @ . .             | Erigeron, per lb. 1.45 @ 1.60                   | Soda Ash, lb., 48% per 100 lb. 2.00 @ . .             |
| lb. bottle. .20 @ .23                               | In reeds, lb. .45 @ .50                       | Geranium Chris. 4.50 @ 7.50                     | Squilla, white, lb. .04 1/2 @ .06                     |
| Muriatic, 18 1/2 deg. .90 @ 1.37 1/2                | Epsom Salts, per 100 lb. 1.00 @ 1.10          | Lavender. 1.20 @ 1.85                           | Sugar Milk, powd., lb. .12 @ .14                      |
| Nitric, 38 degrees. .03 1/2 @ .04 1/2               | Ergot: . . @ . .                              | " Garden. .40 @ .90                             | Sugar Lead, white, lb. .11 @ .11 1/2                  |
| " 40 .04 @ .04 1/2                                  | G'm'n and Russ'n, lb. .40 @ .42               | Lemon, as to brand. 1.35 @ 2.10                 | Lead, brown, lb. .05 1/2 @ .06                        |
| Oxalic, English. .06 1/2 @ .06 1/2                  | Spanish, lb. .48 @ .50                        | Lemongrass. .75 @ . .                           | Sulphate Ammonia, per 100 lb. 2.00 @ 3.00             |
| " German. .06 1/2 @ .06 1/2                         | Ergotine, Domestic. . . @ 4.00                | Musk, per lb. 7.00 @ 8.00                       | Do. Potash, 48% per lb. 1.11 1/2 @ 1.15               |
| Picric. .26 @ 26 1/2                                | German. 4.00 @ . .                            | Myrbane. .17 @ .19 1/2                          | Do. Potash, 90% per lb. 2.10 @ 2.15                   |
| Salicylic. 1.00 @ 1.22                              | Flowers: . . @ . .                            | Neroli. 22.00 @ 22.00                           | Sulphur, Roll. . . @ .01 1/2                          |
| Sulphuric. . . @ .95                                | Arnica Flowers, per lb. .11 @ .12             | Nutmeg. 1.75 @ 2.75                             | Flour. . . @ .01 1/2                                  |
| Tartaric, Crystals. .24 1/2 @ .23                   | Chamomile. . . @ . .                          | Orange. 1.50 @ 1.65                             | Spirit Nitre, U. S. P. .39 @ .40                      |
| " Powdered. .24 @ . .                               | Gambier, New, lb. .18 @ .25                   | Origanum. .24 @ . .                             | Spirit Ammonia, Arom. .44 @ .45                       |
| Tannic. 1.03 @ 1.80                                 | Roman, New. . . @ .24                         | Pennyroyal. 1.40 @ 1.50                         | Sulphuric Ether. .34 @ .61                            |
| Alcohol, Grain, per gal. 2.25 @ 2.26                | Roman, lb., old. 12 @ 20                      | Peppermint, bulk. 2.45 @ 2.65                   | Sumac, Sicily, ton. 72.50 @ 77.00                     |
| (Less rebate.) . . @ . .                            | Lavender Flowers. . . @ . .                   | " HGH. 2.62 1/2 @ 2.65                          | Virginia. 43.00 @ 47.50                               |
| Wood, 95 1/2 deg. 1.40 @ 1.45                       | Ordinary, per lb. .04 @ .08                   | Rose. 7.50 @ 8.00                               | Tar Barbadoes, gal. . . @ .45                         |
| Alcholene. . . @ 1.62                               | Select, per lb. .15 @ .65                     | Sandalwood. . . @ 8.85                          | Tin Crystals, bbls., per lb. .15 @ . .                |
| Alum, Lump, per 100 lb. 1.75 @ . .                  | Gambier, lb. .04 @ .04 1/2                    | Sassafras. .36 @ .38                            | Jars, per lb. .17 @ . .                               |
| Ground, per 100 lb. 1.85 @ 1.85                     | Glycerin, bbls, lb. 13 1/2 @ 14               | Sassafras, Artificial. .24 @ .27                | Tonka Beans, Angost., lb. 1.65 @ 2.10                 |
| Antifebrine, per oz. .19 @ .20                      | Guarana, lb. .07 @ .07 1/2                    | Spearmint. 1.50 @ 1.90                          | Tonka Beans, Para, lb. .55 @ .65                      |
| Antipyrine, per oz. 1.20 @ 1.40                     | Gums: 1.05 @ 1.10                             | Tansy. 2.00 @ 3.00                              | " Surinam. .75 @ . .                                  |
| Arrow root, Berm., lb. .24 @ .25                    | Aloe, Barb, lb. .06 @ .12                     | Wintergreen. 1.62 1/2 @ 1.70                    | Turpentine, Spirits. 31 @ 32                          |
| St. Vincent, in bbl., lb. .11 @ . .                 | " Cape, lb. .05 1/2 @ .08                     | " Artificial. 1.10 @ 1.15                       | Vanilla Beans, lb. 6.00 @ 11.00                       |
| Arctic: . . @ . .                                   | " Curacao, lb. .02 1/2 @ .02 1/2              | Wormwood. .25 @ . .                             | " cut, lb. 4.50 @ 5.25                                |
| Red Saxon, lb. .05 1/2 @ .06 1/2                    | " Socotrine, lb. .28 @ .40                    | Opium, Natur'l, ca., per lb. 2.20 @ 2.25        | Venice Turpentine, barrels, lb. .18 @ .19             |
| White. .03 1/2 @ .03 1/2                            | Arabic 1st picked. .50 @ .55                  | Opium, Ordinary, Jobbing, per lb. 3.30 @ 3.35   | Cans, lb. .10 @ .20                                   |
| Balsam, Copaiba, lb. .30 @ .38                      | " and .36 @ .40                               | Opium, Powd., per lb. 3.20 @ 3.30               | Wax, Brazil, Veg., lb. .09 1/2 @ .17 1/2              |
| Fir, Canada, gal. 2.45 @ 2.55                       | Arabic, sorts. 1.24 1/2 @ 1.3                 | Phenacetine, per oz. .85 @ .90                  | Japan, lb. . . @ .08                                  |
| Fir, Oregon, gal. .75 @ .80                         | Asafoetida, lb. .10 @ .28                     | Prussiate Potash, Yellow, per lb. .21 1/2 @ .22 |   |
| Peru, lb. 1.35 @ 1.50                               | Benzoin, lb. .20 @ .38                        | Red, per lb. .39 @ .42                          |   |
| Tolu, lb. .23 @ .23                                 | Chicle, lb. .29 @ .30                         | Quicksilver, flasks, per lb. . . @ .50          |   |
| Bark, Buckthorn, per lb. .10 @ .10                  | Gamboge, lb. .55 @ .60                        | Quinine: . . @ . .                              |   |
| Cascara Sagrada, lb. .07 @ .08                      | Guaiac, lb. .17 @ .25                         | Domestic, bulk, oz. .22 @ . .                   |   |
| Elm, lb. .10 @ .12                                  | Kino, lb. .75 @ 1.00                          | Domestic, oz. .28 @ .29                         |   |
| Orange peel. . . @ .06                              | Mastic, lb. .75 @ 1.00                        | German, bulk. 1.84 @ 1.84 1/2                   |   |
| Sassafras, per lb. .08 @ .08 1/2                    | Kino, lb. .75 @ 1.00                          | German, oz. .27 @ .28                           |   |
| Soap, lb. .04 @ .04 1/2                             | Myrrh, lb. .20 @ .38                          | Roots, Aconite, lb. .09 @ .14                   |   |
| Bicarb. Soda, Engl., lb. .03 1/2 @ .03 1/2          | Olibanum, sorts, lb. .05 1/2 @ .06 1/2        | Althea, cut, lb. .15 @ .18                      |   |
| domestic, lb. 2.90 @ 3.00                           | " tears, lb. .11 @ .13                        | Arnica, lb. .12 @ .13                           |   |
| Bichromate, Pot'h, lb. 1.04 @ 1.11                  | Sandrac, lb. .29 @ .30                        | Belladonna Ger., lb. .08 @ .12                  |   |
| Bismuth, Sub. Nit., per lb., bulk. 1.95 @ 2.00      | Senegal, picked, lb. .14 @ .60                | Blood, lb. .05 @ .06                            |   |
| Bismuth, Sub. Carb., per lb., bulk. 2.25 @ 2.30     | Sorts, lb. .09 1/2 @ .10                      | Calamus, lb. .07 @ .08                          |   |
| Bleach'g Powd., per lb. .04 1/2 @ .03               | Shellac, DC, lb. . . @ .51                    | Calamus, bleac'd, lb. .21 @ .24                 |   |
| Blue Vitriol, lb. .03 1/2 @ .03 1/2                 | " VSO, lb. . . @ .30                          | Colchicum, per lb. .14 @ .18                    |   |
| Borax, refined, lb. .08 @ .08 1/2                   | " Diam'd I, lb. . . @ .29                     | Colombo, lb. .06 1/2 @ .11                      |   |
| Concentrated, lb. .07 1/2 @ .08                     | " SS, lb. .28 1/2 @ .29                       | Dandelion, Germ. lb. .07 1/2 @ .08              |   |
| Brimstone, best ad, ton 19.00 @ 19.70               | " TN, lb. . . @ .26                           | Dogwood, lb. .08 @ .10                          |   |
| Bromide Potash, Domestic, b'l'k, lb. .33 @ .34      | " Garnet. . . @ .24                           | Galangal, lb. .04 1/2 @ .04 1/2                 |   |
| bottles, lb. .39 @ .40                              | Bleached, lb. .26 @ .27                       | Gentian, lb. .03 1/2 @ .04                      |   |
| Bromide Ammonium, bulk. . . @ .43                   | Tragacanth, Aleppo, lb. 30 @ 58               | Ginseng, lb. 1.75 @ 2.75                        |   |
| Bromide Sodium, b'l'k. .38 @ .38                    | Harlem Oil. . . @ .50                         | Ginger, Jamaica, b'ld., lb. .17 @ .20           |   |
| Bromine, bulk. .38 @ .42                            | Indigo, lb. .45 @ 2.00                        | Ginger, Jamaica, unblch., lb. .14 @ .17         |   |
| Burgundy pitch, per lb. .02 1/2 @ .02 1/2           | Insect Flowers. .10 @ .20                     | Golden Seal, lb. .20 @ .21                      |   |
| Cacao Butter: . . @ .31 1/2                         | Insect Powder, pure, lb. .16 @ .20            | Hellebore, powd., lb. .07 1/2 @ .08             |   |
| 12-lb. boxes, lb. .30 @ .31 1/2                     | Iodide Potash, bulk, lb. 2.70 @ 2.75          | Ipecac, lb. 1.27 @ 1.30                         |   |
| Dutch A., per lb. .39 1/2 @ .34                     | bot's, lb. 2.83 @ 2.88                        | Jalap, lb. .21 @ .24                            |   |
| Caffeine. 1.95 @ 1.95                               | Iodine, Am'r'n, lb. 4.74 @ 6.00               | Kava Kava, lb. .30 @ . .                        |   |
| Camphor, ref'd, bbls., lb. .48 1/2 @ .49            | Japan, lb. .35 @ . .                          | Licorice, select, lb. .08 @ .15                 |   |
| cases, lb. .51 @ .51                                | Juniper Berries, lb. .01 1/2 @ .02 1/2        | " Pow'd., lb. .05 @ .12                         |   |
| Cantharides, Chinese, lb. .28 @ .30                 | Leaves: . . @ . .                             | Lovage, lb. .50 @ .55                           |   |
| Russian, lb. .70 @ .75                              | Belladonna, per lb. 1.04 @ 1.12               | Mandrake, lb. .03 1/2 @ .04                     |   |
| Carb. Ammonia. .08 1/2 @ .09                        | Buchu, short, lb. .12 @ .15                   | Orria, Florentine, lb. .25 @ .35                |   |
| casks, lb. .08 1/2 @ .09                            | " long, lb. .35 @ .40                         | Orria, Verona. .12 @ .14                        |   |
| Cassia Buds, lb. .18 @ 1.84 1/2                     | Coca, prime, lb. .15 @ .30                    | Pink, lb. .22 @ .25                             |   |
| Castor Oil, cases, lb. .15 @ 1.54                   | Damiana, lb. .27 @ . .                        | Rhubarb, whole, lb. .70 @ .80                   |   |
| Barrels, lb. .14 1/2 @ .15                          | Hyoscyamus. .09 @ .12                         | Sarsaparilla, Hond. lb. .30 @ 42 1/2            |   |
| Caustic Soda, 70%, 100 lb. 8.70 @ 8.82 1/2          | Jaborandi, lb. .40 @ .50                      | Sarsaparilla, Mex. lb. .09 1/2 @ .10            |   |
| Caustic Soda, 60%, 100 lb. 2.90 @ 3.10              | Senna Alex nat'l, lb. .14 @ .16               | Senega, lb. .34 @ . .                           |   |
| Chalk, Engl. Precip., bulk, lb. .04 @ .06           | Senna Alex garbled lb. .22 @ .27              | Serpentaria, lb. .20 @ .22                      |   |
| Chloral Hydrate Crystals, bulk, per lb. .05 @ 1.05  | Senna Tinney, lb. .07 @ .20                   | Valerian, Belgian, lb. .07 @ .07 1/2            |   |
| Hydrate crusts, bulk, per lb. .05 @ 1.00            | Stramonium. .05 1/2 @ .08                     | " German, lb. .10 @ .12                         |   |
| Chlorate Pot. Cryst., lb. .15 @ 1.54 1/2            | Licorice, P. & S, lb. .24 @ . .               | Saffron, Amn., lb. .25 @ .35                    |   |
| Pow'd, lb. 1.34 @ 1.54 1/2                          | Lupulin, German. .70 @ 2.25                   | Spanish, Valencia, lb. 6.50 @ 7.00              |   |
| Chloroform, Bulk, lb. .50 @ .51                     | Lycopodium, lb. .53 @ .55                     | Spanish, Alicante, lb. 5.00 @ 5.50              |   |
| Cinchonidine Sulphate of, German, oz. .02 @ .02 1/2 | Manna, large flake, lb. . . @ .15             | Sai Ammoniac, Lump, lb. .08 1/2 @ . .           |   |
| Citrate, U. S. P. Iron, lb. . . @ .59               | Small flake, lb. .42 @ .45                    | Do. Granulated, lb. .05 1/2 @ .09               |   |
| Soluble. . . @ .55                                  | Menthol, Japanese. . . @ 3.70                 | Sai Soda, Eng., 100 lb. .97 1/2 @ 1.02 1/2      |   |
| Iron and Ammonia, lb. . . @ .50                     | Mercurials: . . @ . .                         | " American. .90 @ .95                           |   |
| Iron and quinine. 1.50 @ 1.55                       | Blue Pill, lb. .34 @ . .                      | Salt peter, crude, per lb. .04 1/2 @ .05        |   |
| Iron and strychnine. 2.00 @ 2.05                    | Calomel, lb. .71 @ . .                        | Salt peter, Refined, per lb. . . @ . .          |   |
| Phosphate, U. S. P., lb. . . @ .57                  | Cor. Sublimite, lb. .62 @ . .                 | Seeds, Anise, Ital., lb. .00 @ .10              |   |
| Pyrophos, U. S. P., lb. . . @ .55                   | Mercury and Chalk. .30 @ . .                  | Anise, German, lb. .06 @ .06 1/2                |   |
| Pyrophos, Soluble, lb. . . @ .55                    | Ointment, lb. .30 @ .39                       | Anise, Star, lb. .22 @ .23                      |   |
| Potash, per lb. . . @ .49                           | Red Precipitate, lb. .81 @ . .                | Canary, Smyrna, lb. .33 1/2 @ .03 1/2           |   |
| Soda, per lb. . . @ .42                             | White lb. .86 @ . .                           | Canary, Sicily, lb. .00 1/2 @ .04               |   |
| Cobalt, pow'd, lb. .10 @ .22                        | Morphine, bulk, oz. 1.00 @ 2.05               | Caraway, lb. .06 1/2 @ .07                      |   |
| Cocaine Murate, per oz. 5.25 @ 6.20                 | Eight, oz. 2.30 @ 2.35                        | Cardamon, Aleppy, per lb. .65 @ .75             |   |
| Codine, bulk, oz. 4.15 @ . .                        | Moss, Irish, lb. .06 @ .06 1/2                | Celery, lb. .11 1/2 @ .11 1/2                   |   |
|   | Irish, bleached, lb. .13 @ .15                |   |   |
|   | Muriate Potash, per 100 lb. 1.78 @ 1.85       |   |   |
|   | lb. . . @ . .                                 |   |   |
|   | Napthalene, flake, per lb. .03 1/2 @ .05      |   |   |
|   | Napthalene, Ball, per lb. . . @ .05           |   |   |
|   | Nitrate Silver, oz. .48 @ .49 1/2             |   |   |
|   | Nitrate Soda, 100 lb. 1.65 @ 1.80             |   |   |

## Animal and Vegetable Oils.

|   |                                       |
|---|---------------------------------------|
| Linseed, City, raw, gal. . . @ .50                | Sound, gal. . . @ . .                 |
| Linseed, City, boiled, gal. . . @ .43             | Dark, pressed, gal. .42 @ .42         |
| Linseed, Western, raw, gal. . . @ .48             | Light, pressed, gal. .42 @ .43        |
| Lard, City, Ex. Winter, gal. 1.00 @ . .           | Bleached, Winter, gal. .45 @ . .      |
| Lard, City, Prime, present make, gal. .72 @ .7    | Extra Bleached, gal. .48 @ . .        |
| Lard, City, Extra No. 1, gal. .55 @ .65           | Tallow, City, prime gal. .70 @ .75    |
| Lard, City, No. 1, gal. .50 @ .55                 | Western, prime, gal. .65 @ .70        |
| Cotton-seed, C r u d e, grades, gal. .36 @ .37    | Cocunut, Ceylon, lb. .06 1/2 @ . .    |
| Cotton-seed, Summer Yellow, prime, gal. .42 @ .43 | Cochin, lb. . . @ .07 1/2             |
| Cotton-seed, Summer Yellow, off grades, 40 @ .41  | Cod, Domestic, gal. .38 @ .41         |
| Cotton seed, Winter White, gal. .55 @ .57         | Foreign, gal. .42 @ .45               |
| Sperm, Crude, gal. .75 @ .80                      | Red Elaine, gal. .44 @ .45            |
| Sperm, Natural Spring gal. .85 @ .86              | Red Saponified, lb. .05 1/2 @ .05 1/2 |
| Sperm, Bleached Spring gal. . . @ . .             | Bank, gal. .40 @ .41                  |
| Sperm, Natural Winter, gal. .90 @ .91             | Struts, gal. .41 @ .42                |
| Sperm, Bleached Winter, gal. .95 @ .96            | Olive oil for table in tins 50 @ 1.85 |
| Whale, Crude, gal. . . @ . .                      | Olive, Com'n bbls, gal. .58 @ .60     |
| Whale, Natural Winter, gal. .50 @ . .             | Neatsfoot, prime, gal. .77 @ .80      |
| Whale, Bleached Winter, gal. .50 @ . .            | Palm, prime, Lagos, lb. .03 1/2 @ .06 |
| Whale, Ex. Bl'ch'd, gal. .57 @ . .                |                                       |
| Menhaden, Crude, Sound, gal. .40 @ . .            |                                       |
| Dark, pressed, gal. .42 @ .42                     |                                       |
| Light, pressed, gal. .42 @ .43                    |                                       |
| Bleached, Winter, gal. .45 @ . .                  |                                       |
| Extra Bleached, gal. .48 @ . .                    |                                       |
| Tallow, City, prime gal. .70 @ .75                |                                       |
| Western, prime, gal. .65 @ .70                    |                                       |
| Cocunut, Ceylon, lb. .06 1/2 @ . .                |                                       |
| Cochin, lb. . . @ .07 1/2                         |                                       |
| Cod, Domestic, gal. .38 @ .41                     |                                       |
| Foreign, gal. .42 @ .45                           |                                       |
| Red Elaine, gal. .44 @ .45                        |                                       |
| Red Saponified, lb. .05 1/2 @ .05 1/2             |                                       |
| Bank, gal. .40 @ .41                              |                                       |
| Struts, gal. .41 @ .42                            |                                       |
| Olive oil for table in tins 50 @ 1.85             |                                       |
| Olive, Com'n bbls, gal. .58 @ .60                 |                                       |
| Neatsfoot, prime, gal. .77 @ .80                  |                                       |
| Palm, prime, Lagos, lb. .03 1/2 @ .06             |                                       |

# American Druggist and Pharmaceutical Record.

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## POISON IN ICE-CREAM.

CHEMISTS who have succeeded like Vaughan in isolating the peculiar body known as tyrotoxin have not yet been able to describe its chemical properties or even assign it to its proper place among other toxins or ptomaine-like bodies.

The reports of several fatal cases of ice-cream poisoning during the past month have served to direct attention anew to this source of danger, and we have received more than one communication on the subject from those who are interested in the various theories which have been expounded in the attempt to explain satisfactorily the mystery attending the deaths of the victims of poisoning by the cream. One correspondent is disposed to set aside the ptomaine theory altogether, confining his attention to the substances used as preservatives of the cream.

Sodium and potassium carbonates, he asserts, are commonly used as preservatives, and it is to their presence in the cream that he would attribute many of the toxic symptoms so often produced. We cannot fully agree with our correspondent in this but think his contention worthy of some consideration. Meanwhile deaths from ice-cream poisoning are reported with painful regularity, and physicians seem powerless to save the patient when once the symptoms of poisoning have set in. A contemporary declares that "the mystery of ice cream poisoning is a reproach to the professions of medicine and chemistry," and to this few will be found to take exception.

## THE INTERNATIONAL CONGRESS.

NOW that the Seventh International Congress has passed into history it may be of interest to review some of the factors which prevented that convention from being as broadly and fully international in character as had been hoped for by those who have the interest of pharmacy really at heart.

The announcement made by the authorities of the Exposition of the series of congresses to be held, including the congress on pharmacy, left the impression on the minds of some that the International Congress proper was to be entirely subsidiary to the Auxiliary Congress of the World's Columbian Exposition.

Some of the prospective participants in the International Congress from abroad felt averse to placing that body in the position of being patronized by a body local and ephemeral in character, however distinguished its individual members might be. The later statements of the Exposition authorities did much to correct the erroneous impression entertained on this head. Unfortunately, however, there were agencies at work fomenting the feeling of distrust engendered by the earlier announcements. These agencies were the insinuations and innuendoes of certain disgruntled men who, whether rightly or not, feared that they would not be able to make capital for themselves out of the Congress and so sought by disparaging it to prevent others from reaping the honors which they feared were to be denied them.

It can readily be understood that it would require but a few discouraging words from those claiming citizenship in America to keep Europeans away from the Congress even should they come to this country.

As Dr. Leo Egger of Vienna said, the preconceived ideas of America and things American held by his countrymen, even of the more intelligent class, are decidedly unjust. Now let these unjust conceptions be intensified in their injustice by men resident in this country and it will readily be seen that in sections where these two-fold deterrent causes are at work we could not expect any very general interest in the Congress.

It is a source of congratulation to pharmacy that this dog-in-the-manger spirit did not succeed in completely nullifying the efforts of those broad-minded men who devoted much time, thought and energy to the effort toward making the Congress an international one.

## Recent Experiments With Ipecac Root.\*

BY ALFRED R. L. DOHME, A.B., Ph.D.,

Baltimore, Md.

Having had numerous occasions to handle, examine and assay various kinds and grades of ipecac root, it occurred to the writer that it might be possible to determine the location of the emetine in the root. This is generally supposed to repose in the horny envelope, covered with annulated rings which surrounds the woody central cylinder. It is for this reason that as a rule the thicker root, generally termed "fancy" in commercial vernacular, is the highest priced and most generally preferred; most persons arguing that if this envelope contains the emetine, and the thick "fancy" root is made up principally of this envelope, it is safer, and better to buy the "fancy" root.

Flückiger† says that it is well known that the central woody portion of ipecac root contains little or no emetine, and that it is not known whether the cork layer or the cortical parenchyma is the seat of the alkaloid. A microscopic examination of the root will show that the cortical parenchyma is not colored, while the cork layer is—the color being exactly that of emetine residues obtained from assays of ipecac root. Now it is generally admitted that emetine is combined with ipecacuanhic acid in ipecac root, and as this reappears with the emetine, as the ammonium salt, in part at least in the final extract of the assay, and has the color of the cork layer as seen under the microscope, the chances are that the emetine is to be found in the cork layer rather than in the cortical parenchyma. In order to bring some experimental evidence to bear upon the subject, it was necessary to separate the various parts of the root and to examine them separately as to their contents of emetine. To that end a quantity of ipecac root from different lots was deprived of its cortex by scraping, care being taken to use only non-annulated roots, hence little cortical parenchyma, and thus separate the woody central portion from the cortex. These were then ground separately to a No. 30 powder and assayed separately. To facilitate matters we will describe the different kinds of roots examined, and give their names as follows:

"Fancy" A. "Wiry" A. "Woody Portion" A. "Wiry Scrapings" A.  
 "Fancy" B. "Wiry" B. "Woody Portion" B.  
 "Fancy" C. "Wiry" C. "Woody Portion" D. "Wiry Scrapings" B.  
 Etc.

Where A, B, C and D are four distinct samples of ipecac root, and "Fancy," "Wiry," "Woody Portion," etc., are terms described below. "Fancy" root denotes the thick large root possessing annulated rings and consisting largely of cortical parenchyma gorged with starch. "Wiry" root denotes the thinner ordinary root, without annular rings, consisting mainly of an inner woody root with a thin cortex. "Woody Portion" denotes the inner woody portion of the root after the cortex has been completely removed by scraping, and presents a perfectly white appearance. "Wiry Scrapings" denotes the cortex scraped from the "Wiry" root.

The method of assaying the roots adopted was that of Lyons‡ which has always yielded the writer the best results,§ and which is in brief as follows:

"Ten (10) grammes of ipecac root in No. 30 powder, or finer, are shaken with 100 c.c. of Prollius' Fluid and set aside for about fifteen hours. Fifty cubic centimeters are then filtered off and the ether evaporated.

Next about 5 c.c. of two per cent. sulphuric acid are added and stirred with the residue, adding a little ether to redissolve the resin, fats, etc., and insure complete solution of all the emetine in the acid. Now evaporate all the ether on a water bath, and filter the acid liquid into a separating funnel and wash both beaker and filter with acid water. Return the small filter to the beaker and again treat with ether and acid as before. Filter again. Continue this until a drop of the acid solution no longer renders turbid a solution of mercurio-potassium iodide. Add 10 c.c. of ether to the separating funnel and shake with the acid solution therein contained after closing it tightly. Separate the ether and pour into the waste ether bottle. Now render alkaline with ammonia and shake out the alkaloid with a mixture consisting of three parts of ether and one part of chloroform, using about 15 c.c. of the latter mixture at a time and continuing until a drop of the alkaline solution no longer becomes turbid, after acidifying, when treated with a drop of a solution of mercurio-potassium iodide. Evaporate the combined ether-chloroform solutions to dryness at a moderate heat, finally heating to constant weight at 100° C., in a weighed glass evaporating dish. Below are appended the results:

| Drug taken in No. 30 powder. | Gravimetric per cent. of Emetine. | Per cent. of Emetine by titration of previous results. |
|------------------------------|-----------------------------------|--|
| "Fancy" A.....               | 1.92                              | 1.36   |
| "Fancy" B.....               | 1.87                              | 1.89   |
| "Fancy" C.....               | 1.88                              | 1.36   |
| "Fancy" D.....               | 2.10                              | 1.44   |
| "Wiry" A.....                | 2.80                              | 2.03   |
| "Wiry" B.....                | 2.10                              | 1.88   |
| "Wiry" C.....                | 2.30                              | 1.69   |
| "Woody Portion" A.....       | 1.87                              | 0.56   |
| "Woody Portion" B.....       | 0.77                              | 0.55   |
| "Woody Portion" D.....       | 0.68                              | 0.44   |
| "Wiry Scrapings" A.....      | 2.95                              | 2.18   |
| "Wiry Scrapings" B.....      | 2.60                              | 2.17   |

## CONCLUSIONS.

From these figures, and the microscopical examination of the root, may be deduced the following conclusions:

I. That but little emetine is to be found in the greater part of the parenchyma, which is gorged with starch and is colorless, while the parenchyma nearest the cork layer, as well as the cork layer itself, possesses the color of emetine residues obtained in assays of ipecac root to a degree, and shows secretions which are most probably emetine ipecacuanhate in all parts of them.

II. That the "Wiry" root yields the largest percentage of emetine.

III. That the inner "Woody Portion" of the root contains very little emetine.

IV. That most of the emetine is situated in the cork layer, and the parenchyma cells closest to the cork layer.

**Tolypyrrin.**—At a meeting of the Berlin Medical Society P. Guttman read a paper on recent advances in the preparation of synthetic chemicals: For some years past, he remarked, chemistry has busied itself in preparing synthetical compounds similar to antipyrin. From the J. D. Riedel Fabrik comes tolypyrrin, which, in kind and strength, is similar to antipyrin and fulfils all the indications of the latter substance. On account of its cheapness, it is preferable to antipyrin. Its chemical composition is expressed by the term *para-tolylidimethylpyrazolon*. Tolypyrrin is colorless, crystalline, of bitter taste, soluble in ten parts of water, almost insoluble in ether. Its chemical reactions are similar to those of antipyrin, being colored violet by chloride of iron and green by the nitrates of sodium and potassium.

\*Read at the Chicago Meeting of the American Pharmaceutical Association.

†Flückiger—Pharmakognosie des Pflanzenreichs. III. edition, page 425.

‡Lyons—Manual of Pharmaceutical Assaying, § 29, page 20.

§Dohme—Pharmaceutical Review, Vol. I, page 15.

## Poisonous Plants and Their Poisons.

(Concluded from Page 103.)

It seems, however, that poisons in general, whichever way they may be introduced into the body, kill by finally acting on the brain through the nerves. It is worth noticing that opium, morphine, belladonna, alcohol, etc., chiefly act directly on the brain; strychnine, tobacco and camphor on the spinal cord; aconite, cicuta, colocynth and colchicum on the ganglion system. The upas and wourali poisons, like that of venomous snakes, act by altering and decomposing the blood.

Of all poisons, those of vegetable origin are perhaps the most common and certainly the most violent. Unfortunately they are also the most difficult to determine, for while nearly all mineral poisons are well known and comparatively easy to analyze, and the poisons of animals readily obtained in a pure state for study, the poisons produced by plants can only be extracted after a lengthy process of distillation—too lengthy, indeed, and, besides, too varied to be described here. The toxic agents of many plants have not been discovered yet, and of those that are known, only a few, such as strychnine, morphine, brucine, etc., have been subjected to a thorough study. The result of this is, that while there are numerous tests by which to identify mineral poisons, the determination of the vegetable alkaloids is, mostly, very uncertain. The toxic products of plants are determined by two methods, *i.e.*, by their reaction when subjected to certain chemical agents or to the blowpipe, and by a microscopical examination of the crystals of the alkaloids. As to chemical tests, the following may be of interest:

Iodic acid stains all vegetable alkaloids brown.

*Morphine* gives a blue stain with chloride of iron or gold; sulphuric acid turns it first yellow and then red.

*Strychnine*.—Sulphocyanide of soda, if introduced into a solution of strychnine, soon causes the crystallization of the alkaloid.

*Veratrine* is turned milky by the same reagent.

*Emetine* is turned milky by the same reagent, and yellow by chlorate of platinum.

*Brucine* is turned first pink by concentrated sulphuric acid, and then deepens to blood-red.\*

The crystallization of alkaloids is of a very constant character in each case, and the microscopical examination of their crystals often enables us to identify the alkaloids when other means fail, on account of their not being affected by the usual reagents in the very diluted state in which they are sometimes found. Here, then, we must again seek the aid of the most entertaining and at the same time most useful of scientific instruments—the microscope; and we shall obtain, as usual, the most surprising and wonderful results. The smallest crystals of alkaloids can be determined by examination under the microscope. Dr. Wormley states that micro-chemical analysis enables us by a very few minutes' labor to recognize with unerring certainty the reaction of the 100,000th part of a grain of prussic acid or arsenic. Fluids containing alkaloids in such minute quantities as would not answer to chemical procedure may be detected in the following way: A drop of water containing infusoria is placed, uncovered, on a slide, and while this is being examined under a suitable power, a little of the suspected fluid is applied, when, if an organic poison be present, the infusoria falls in a formless sediment. The 15,000,000th part of a grain of atropine, it is said, may be thus detected! (Professor Rossbach.) In fact,

as the late Dr. Carpenter says, in the last sentence of his work on "The Microscope": "By the careful prosecution of micro-chemical inquiry especially with the aid of the spectroscope (where admissible), the detection of poisons and other substances in very minute quantity can be accomplished with such facility and certainty as were formerly scarcely conceivable."

## Chemistry in Cane Sugar Manufacture.\*

By J. T. CRAWLEY,  
Sugarland, Texas.

During recent years the part played by chemistry in the manufacture of sugar from the sugar cane has become an important one. Cane sugar manufacture is older than beet sugar manufacture, but it remained for those interested in the latter to work out the practical and scientific questions that make the industry of such vast importance at the present time. It is only in recent years that the same scientific principles have been applied in tropical countries in the field and in the factory. Important among the recent improvements has been the application of chemistry to the better understanding of the various changes that the raw material may undergo while being converted into refined products.

When the cane is brought from the fields it is weighed, and then, in most cases, is passed between immense iron rollers where the juice is expressed. By recent improvements in mills the per cent. of juice actually obtained has increased from the neighborhood of 65 per cent. to from 75 to 80 per cent.

This great improvement has been made, of course, by the engineer, but it is safe to say that without the aid of the chemist in calling attention to the immense losses in the bagasse these improvements would have been delayed many years.

After expression the juice is either weighed or measured and then the real work of chemistry begins. Because of the changes that the contained sucrose may undergo during subsequent processes the juice is analyzed for sucrose, glucose, total solids, ratio of sucrose to glucose and ratio of sucrose to the total solid matter. This gives, by proper calculations, the total amount of the various ingredients entering the factory with the various ratios one to the other. These ingredients with their ratios must be watched very closely to see that impurities are not formed at the expense of the cane sugar. Lime is added to the raw juice for the purpose of neutralizing the acids contained therein, and in order to purge it of many of the impurities that would interfere with the subsequent crystallization of sugar. Here again a strict watch must be kept. An insufficient quantity of lime leaves free acids in the juice and these same acids will act upon the sucrose changing it into glucose, or inverted sugar, during the evaporation of the juice and syrup. Analyses are made of clarified juice, syrup, massecuite, etc., and from these analyses, together with the weights of these various products, the chemist is enabled to detect any important loss that has been sustained, whether it be chemical or mechanical, and from a scientific examination of the data thus furnished the manufacturer is enabled to so modify the various processes as to get the best results; finally the sugar and molasses are analyzed, and thus a complete record is had of the whole process from the entering of the cane to the final output of sugar and molasses. It will thus be seen that the chemist is the bookkeeper, so to speak, of the sugar during the process of manufacture, and it is his business to point out losses, and, if possible, suggest remedies.

\*Science, Vol. xxii, 551.

\*For further information on this point see any of the numerous works on medical chemistry, or Wittstein's excellent treatise on "The Organic Constituents of Plants," F. von Muller's translation, Melbourne, 1878.

# COLUMBIAN EXPOSITION

## MEETING OF THE SEVENTH INTERNATIONAL PHARMACEUTICAL CONGRESS.

(Continued from page 141.)

President Remington appointed on the committee suggested in the resolution the following: Prof. Whelpley of St. Louis, N. H. Martin of London, Mr. Muir of Canada, Dr. Ramlot of Brussels, and S. A. D. Sheppard of Boston.

Several papers which had been presented to the Congress and printed in English, French, German and Spanish were next distributed, and the chair announced that as many as possible would be read before the session closed.

The first one read was entitled: "On the Scope of the Pharmacopœia," by Dr. G. Vulpius, of Heidelberg, Germany, and in connection with this paper there was also read: "Supplementary Remarks to Section III. (Pharmacopœia Questions), of the Seventh International Pharmaceutical Congress held at Chicago," by the same author.

A paragraph in the first paper caused some discussion, and some speakers took decided exception to it. This paragraph was as follows: "Primarily it is to be regarded that all such medicaments must be accepted which the physicians of the country, through their colleagues who have been elected or nominated for this purpose designate as important, and which are often prescribed by them."

Dr. Ramlot, of Brussels, said that he would strongly oppose such an argument, because it would introduce patent medicines into the pharmacopœia. He further insisted that the pharmacopœia should be for drugs only and that the commission should not do anything but secure a standard of strength or something similar.

On motion of Mr. Breslin, Dr. Ramlot was requested to prepare a paper on the subject and present it to the Congress.

Mr. Oldberg said that as the Brussels congress had declared emphatically against the introduction of pharmaceutical specialties into the pharmacopœia, and the author had been present and agreed with the sentiment, there was no doubt that he had no intention of advocating such a thing. His views had been misunderstood.

The next paper presented was entitled "Pharmacopœial Nomenclature" and was by Dr. E. Biltz, of Erfurt. It advocated certain changes in the present nomenclature of drugs, which were not favorably regarded by several delegates who criticised the paper, among whom were Messrs. Cartelghe, Martin, Neygaard, Danielson, Slack and Hallberg.

The time allowed to the session having now expired, the Congress, on motion of Mr. Cartelghe, adjourned until 10 A.M., Tuesday, Aug. 22.

At 8 o'clock on Monday evening the Congress was tendered a reception by the American Pharmaceutical Association, the Illinois Pharmaceutical Association and the Chicago Apothecaries Society, at the hall of the Press Club in the Schiller Building. Everything provided for the entertainment of the guests, who enjoyed thoroughly the hospitality of their Chicago hosts. [Mention was made of this in last week's paper.]

### THIRD SESSION.

It was 11 A.M. before the proceedings of the third session were opened on Tuesday.



HENRY BIROTH,  
Local Secretary of the A. P. A.

August 22, probably as the result of the festivities in which the delegates had indulged the evening before.

After President Remington had called the meeting to order, Secretary Oldberg read the minutes of the previous sessions, which were duly approved.

The chair invited further discussions on the subject of the International Pharmacopœia.

Professor Oldberg said that since the subject of the International and National Pharmacopœias was under discussion, it

was proper to introduce a subject which had been discussed in that connection at previous congresses, the subject of weights and measures. Every pharmaceutical congress heretofore has expressed its conviction concerning the system of weights and measures which ought to be in use in pharmacopœias and by pharmacists throughout the world. He therefore submitted the following: "Resolved, that the Seventh International Pharmaceutical Congress hereby reaffirms the opinion expressed by preceding international pharmaceutical congresses, that the decimal system of measures based upon the meter ought to be the only system of measures used in pharmacopœias; and further, this Congress believes that fluid measures should be employed in the measurement of liquids." "There is only one civilized country, at present, using anything else than the metric system," said Professor Oldberg.

Mr. Martin, of England, in commenting upon the resolutions said that Professor Oldberg probably referred to England. The Pharmacopœial Committee of that country had had very good reasons for continuing the old method, and those reasons would very likely be given in the new pharmacopœia. But the metric system is in common use in England among scientific men, and if certain difficulties were removed no English pharmacist would be opposed to its introduction into the pharmacopœia.

Mr. Bartley moved, as an amendment, that the resolutions also express the desire that the centigrade or celsius degrees be used entirely for the expression of thermometric degrees.

With this amendment, the resolutions were adopted.

The Congress next discussed the question of pharmaceutical education and legislation, and in connection with this subject the chair presented a paper contributed by the Pharmaceutical Board of Victoria, Australia.

President Remington asked Mr. Cartelghe to express his views on the subject, and Mr. Cartelghe made a long address, in which he pointed out the defects of the English and American requirements for graduation and registration. The present systems of examination made it possible for shrewd but incompetent beginners in the business to successfully prepare for a board of examination with the aid of quiz books and examination papers, while practical and competent young men often failed to pass. The latter, however, were decidedly more desirable acquisitions to the ranks of pharmacy. The Australian law expressed Mr. Cartelghe's sentiments exactly as to what the qualifications for registration should be, namely, four years' prac-

tical training in a store with a preliminary examination before final examinations were permitted.

Mr. Muir, of Montreal, remarked that the law in Quebec was much the same as that in Victoria, Australia, and its effects had been very beneficial to the profession.

Dr. Eccles said that in his opinion education was the formation of correct habits. If a beginner in pharmacy were properly trained at first, although not scientifically, it would be the correct way, practical training being desired. A photographer could make good photographs without knowing about the scientific structure of the chemicals he used, an electric motor man could run an electric engine without understanding the science of electricity. So, in pharmacy, by working in a drug store it was possible for a young man to form correct habits, pharmaceutically, without understanding the higher branches of chemistry and materia medica.

Professor Fennel replied that much stress was laid on practical experience, but to his idea it depended largely upon what constituted that experience. Was it to be gained behind a soda water counter, a cigar case or behind the prescription counter? If the training could be specified everyone would indorse the practical proposition; otherwise, we must rely exclusively on the colleges of pharmacy for higher training.

Mr. Martindale, of London, condemned the practice of students studying while engaged in business, putting in half time at the drug store and half time at the college, because the commercial matters distracted the mind from study and destroyed its effect. To learn properly, the student should put in at least a year at a college and do nothing while attending the lectures but confine his attention to the instruction he was receiving.

Dr. Ramlot, of Brussels, whose remarks were translated by Dr. James, of St. Louis, said that the last congress had rightly selected the title, "Doctor in Pharmacy" as the proper appellation for well qualified members of the pharmaceutical profession in recognition of the responsible nature of their work, their learning and attainments. This title should be conferred where proper examinations had been passed.

Dr. Ramlot had written a paper on the subject of the pharmacopoeia and pharmaceutical education, which he would present to the Congress before adjournment.

Mr. Breslin, of New Orleans, said that any lowering of the standard of pharmacy was due to the druggists themselves. If they would pay as much attention to the quality of their young assistants as they did to the preparations they dispense, an improvement would soon become evident.

On motion, the president was then instructed to appoint a committee to consider the subject of pharmaceutical education and to present a report at the next session. The chair appointed on this committee Messrs. Caspari, Muir and Hallberg.

Professor Whelpley reported on behalf of the committee appointed to consider the resolutions presented at the second session by Mr. Sheppard, regarding the international pharmacopoeia. The report was as follows: "Your committee appointed to consider the resolutions brought up the following as a substitute for the original resolutions: First, *Resolved*, That this Congress appoint a committee of three, of which the president of this Congress shall be chairman, the duty of this committee to be to arrange for the appointment by the various pharmacopoeial committees of the various countries, or otherwise, if necessary, of a commission to compile, publish and

distribute an international pharmacopoeia of potent remedies. This commission shall consist of one member from each country represented at this Congress and such other countries as the committee may desire. Said committee of three shall be a permanent committee and it shall be their duty to urge and expedite the work in every proper way. Second, *Resolved*, That in the event of the death or resignation of any member of this permanent committee of three, the vacancy thus produced shall be filled by appointment by the remaining members. Third, *Resolved*, That this Congress accept the proffer made by the American Pharmaceutical Association of the sum of one thousand dollars to help defray the expense of compiling, publishing and distributing an international pharmacopoeia."

On motion of Mr. Rogers, the resolutions were adopted.

Mr. Sheppard said that he heartily indorsed the amendments made to his original resolutions, which he thought were in every way desirable.

President Remington announced that the appointment of the committee of three would be in order, and invited nominations.

Mr. Martin, of England, moved that Mr. Cartelghe, president of the Pharmaceutical Society of Great Britain, be chosen for the second member, President Remington being the first. The motion was carried.

Mr. Cartelghe moved that Anton von Waldheim, of Vienna, be selected for the third member, and the Congress favored the suggestion by voting unanimously for its adoption.

A paper entitled "Pharmacy in Mexico," by Professor A. Velasco Quiros, was presented, and on motion referred to the committee on publication.

There was also presented various communications received by the committee on arrangements from distinguished foreign pharmacists, which had been printed in the form of a paper for submission to the Congress. Copies of this were distributed.

This finished the business laid out for the session, and there being nothing further requiring consideration, the Congress on motion adjourned until 10 A.M., Wednesday, Aug. 23.

#### FOURTH SESSION.

On Wednesday, Aug. 23, President Remington called the Congress to order at 10.30 A.M. Secretary Oldberg read the minutes of the preceding session, which on motion were approved.

The president announced that the first business before the Congress would be the consideration of the relation of pharmacists to public sanitation and the subject of adulteration of food. This important question, he stated, had been referred to the present meeting by the sixth international congress.

Professor Prescott, of the University of Michigan, was the first speaker who took up this subject. An adulteration, in his opinion, was the change of an article by the addition of foreign constituents, and, no matter whether it was of a generally adulterous nature or not, it was a sanitary offense. For instance, some manufacturer might assert that cotton oil is just as wholesome as olive oil, but science has recognized that the ease with which either can be digested varies with the individual. Therefore, when a person purchased olive oil, he had a right to get it, and giving him an imitation or mixed article was a sanitary offense.

Professor Fennel thought that a committee should be appointed to specify what should constitute an adulteration. A dis-

crimination should be made between accidental, incidental and intentional adulterations. An intentional adulteration was a clear fraud and a sanitary offense; an incidental adulteration would be, for example, the addition of flour to baking powder, while an accidental adulteration could not be governed at all. Still a standard might be fixed covering the maximum amount of co-product.

President Remington, commenting upon these suggestions, said that while some important points had been covered there was a good deal more to be said. The last speaker had referred to baking powder, but that was a compound product which the manufacturer could prepare as he chose. It was different with articles like quinine sulphate, which had been analyzed and a standard of purity established. It was the same with flour, pepper and other unmixed substances. The mixed preparations could not well be considered. Professor Remington said he had given the subject of adulteration a great deal of consideration for some years past and had come to the conclusion that anti-adulteration laws were more easily enforced in Europe than in the United States. Any action that the pharmaceutical congress might take should be governed by this fact.

Professor Fennel said that some laws had been passed condemning the addition of a substance to improve the appearance of an article, such, for instance, as the addition of white of egg to coffee. The addition of salicylic acid to catsup was also considered an adulteration. Other legislatures, however, did not seem to consider that these additions were adulterations. It was therefore necessary to consider what shall constitute adulteration and to what extent adulteration shall exist.

Professor Sayre moved, as an amendment, that a standing committee be appointed, which shall take up the subject of adulteration and confer with other organizations and with other committees for the purpose of bringing about practical laws for the prevention of adulteration.

Mr. Rogers, of Louisville, said that the expression of an opinion on the subject by the Congress would undoubtedly be of benefit in securing legislation. In Kentucky, efforts were being made toward enacting an anti-adulteration law, and if it were possible to get the sense of the Congress, it would be of great assistance. It might also have some effect in preventing the recurrence of an incident that once happened in the Kentucky legislature, where a bill relating to pharmacy was referred to the committee on agriculture because it related to farms. (Laughter—applause.)

Professor Prescott remarked that the employment of the word "falsification" would tend to distinguish the two classes of adulterations, the intentional and incidental.

Mr. Martindale, of England, said that he considered the subject was more of a national than an international character. In most European countries, excellent anti-adulteration laws were in force. In England, however, a difficulty was experienced. The public analysts were too zealous and harassed pharmacists without just cause. Specimens of soda water, for instance, had been taken from drug stores analyzed, and the retailers fined because the specimens were not up to the standard of the British Pharmacopoeia, namely, 15 grains to the half pint. Would American pharmacists like to have such a law? Lately, however, the ruling has been that the pharmacopoeia is a standard of medicinal substances only, and not dietetic preparations such as soda water.

(To be Continued.)

**TABLE OF SPECIFIC GRAVITIES NAMED IN THE U. S. PHARMACOPŒIA, 1800.**

Compiled by Dr. J. F. Golding,  
Instructor in Pharmacy, Brooklyn College of Pharmacy.

|                                   | At 15° C.             |                                | At 15° C.                  |
|-----------------------------------|-----------------------|--------------------------------|----------------------------|
| Acidum acetieum.....              | about 1.048           | Oleum aurastii corticis.....   | about 0.850                |
| " dilutum.....                    | about 1.008           | " florum.....                  | 0.875 to 0.890             |
| " glaciale, not higher than 1.038 |                       | bergamotte.....                | 0.880 to 0.885             |
| hydrobromicum dilutum.....        | about 1.077           | cadium.....                    | about 0.900                |
| hydrochloricum.....               | about 1.163           | cajuputi.....                  | 0.925 to 0.929             |
| " dilutum.....                    | about 1.050           | eari.....                      | 0.910 to 0.920             |
| hypophosphoreum dilutum.....      | about 1.046           | caryophylli.....               | 1.060 to 1.067             |
| lactieum.....                     | about 1.853           | chenopodii.....                | about 0.970                |
| nitricum.....                     | about 1.414           | cinnamomi.....                 | 1.055 to 1.065             |
| " dilutum.....                    | about 1.057           | copaibe.....                   | 0.890 to 0.910             |
| oleicum.....                      | about 0.900           | coriandr.....                  | 0.870 to 0.885             |
| phosphoricum.....                 | not below 1.710       | cubeba.....                    | about 0.980                |
| " dilutum.....                    | about 1.057           | erigerontis.....               | 0.850                      |
| " sulphuricum.....                | not below 1.835       | eucalypti.....                 | 0.915 to 0.925             |
| " aromaticum.....                 | about 0.930           | feniculi.....                  | not less than 0.960        |
| " dilutum.....                    | about 1.070           | gaultheria.....                | 1.175 to 1.185             |
| sulphureum.....                   | not less than 1.035   | gossypii seminis.....          | 0.920 to 0.930             |
| Adeps.....                        | about 0.935           | hedera.....                    | 0.930 to 0.940             |
| Aether.....                       | 0.725 to 0.728        | juniperi.....                  | 0.850 to 0.860             |
| acetieus.....                     | 0.895 to 0.895        | lavandulae florum.....         | 0.885 to 0.897             |
| Alcohol.....                      | about 0.860           | limonis.....                   | 0.858 to 0.859             |
| absolutum.....                    | not higher than 0.707 | lini.....                      | 0.930 to 0.940             |
| deodoratum.....                   | about 0.816           | menthae piperita.....          | 0.900 to 0.920             |
| dilutum.....                      | about 0.936           | " viridia.....                 | 0.930 to 0.940             |
| Amyl nitricus.....                | 0.870 to 0.880        | morrhua.....                   | 0.920 to 0.925             |
| Aqua ammoniac.....                | 0.960                 | myrica.....                    | 0.975 to 0.990             |
| " fortior.....                    | 0.901                 | myristica.....                 | 0.870 to 0.900             |
| hydrogenii dioxidi.....           | about 1.006 to 1.028  | oliva.....                     | 0.915 to 0.918             |
| Balsamum peruvianum.....          | 1.135 to 1.150        | piceis liquidae.....           | about 0.970                |
| Benzinum.....                     | 0.670 to 0.675        | pimenta.....                   | 1.045 to 1.055             |
| Bromum.....                       | 0.900                 | ricini.....                    | 0.950 to 0.970             |
| Camphora.....                     | 0.905                 | rosa.....                      | 0.905 to 0.915             |
| Carbonel disulphidum.....         | 1.266 to 1.269        | rosmarini.....                 | 0.895 to 0.915             |
| Cera alba.....                    | 0.965 to 0.975        | sabina.....                    | 0.910 to 0.940             |
| " flava.....                      | 0.935 to 0.967        | santali.....                   | 0.970 to 0.978             |
| Cetaceum.....                     | about 0.945           | sassafras.....                 | 1.070 to 1.090             |
| Chloroformum.....                 | not below 1.490       | seami.....                     | 0.900 to 0.923             |
| Copaiba.....                      | 0.940 to 0.940        | sinapis volatile.....          | 1.018 to 1.029             |
| Cresotum.....                     | not below 1.070       | terebinthinae.....             | 0.855 to 0.870             |
| Eucalyptol.....                   | 0.930                 | " rectificatum.....            | 0.855 to 0.865             |
| Fel bovis.....                    | 1.018 to 1.028        | theobromatis.....              | 0.970 to 0.980             |
| Glycerinum.....                   | not less than 1.250   | thymi.....                     | 0.900 to 0.930             |
| Hydragryum.....                   | 1.5584                | tigili.....                    | 0.940 to 0.960             |
| Iodoformum.....                   | 0.900                 | Petrolatum liquidum.....       | 0.875 to 0.945             |
| Iodum.....                        | 0.900                 | " molle.....                   | 0.875 to 0.945             |
| Limonis succus.....               | not less than 1.030   | " spissum.....                 | 0.875 to 0.945             |
| Liquor ferri acetatis.....        | about 1.160           | Phosphorus.....                | 1.000                      |
| " chloridi.....                   | 1.387                 | Resina.....                    | 1.070 to 1.080             |
| " citratu.....                    | 1.850                 | Spiritus aetheris nitrosi..... | about 0.836 to 0.848       |
| " nitratu.....                    | 1.090                 | " ammoniac.....                | 0.810                      |
| " subsulphatis.....               | 1.550                 | " aromaticus.....              | 0.900                      |
| " tersulphatis.....               | 1.390                 | " frumenti.....                | not more than 0.930        |
| hydragryi nitratu.....            | 1.100                 | " nor less than 0.917          |                            |
| plumbi subacetatis.....           | 1.105                 | " glonini.....                 | 0.826 to 0.838             |
| potassu.....                      | 1.036                 | " vini gallici.....            | not more than 0.641        |
| sode.....                         | 1.050                 | " nor less than 0.925          |                            |
| " chlorate.....                   | 1.058                 | Syrupus.....                   | about 1.317                |
| sodii silicatis.....              | 1.300 to 1.400        | " acidi hydriodici.....        | 1.313                      |
| sinci chloridi.....               | about 1.335           | " ferri iodidi.....            | 1.353                      |
| Mel.....                          | 1.375                 | Terebenum.....                 | 0.860                      |
| Methyl salicylas.....             | 1.185 to 1.185        | Thymol.....                    | solid—1.069                |
| Oleum adipis.....                 | 0.910 to 0.920        | " liquified—lighter than water |                            |
| " Atherum.....                    | 0.910                 | Tinctura ferri chloridi.....   | about 0.960                |
| " amygdala amara.....             | 1.060 to 0.970        | Vinum album.....               | 0.960                      |
| " expressum.....                  | 0.915 to 0.920        | " rubrum.....                  | 0.960                      |
| " anil.....                       | ++                    | Zincum.....                    | 6.0 (cast) to 7.8 (rolled) |

0.714 to 0.717 at 25° C.  
 0.812 at 24° C.  
 0.795 at 23° C.  
 0.812 at 24° C.  
 † About 0.997 at 15.0° C., and about 0.990 at 24° C.

†† About 0.001 to 0.002 at 17° C.

### Fluid Extract of Liquorice as a Foam Producer.

For a number of years I have been using fluid extract of liquorice root for the production of foam on soda water with such satisfaction to myself, and to others to whose attention I have called it, that it appears like an act of selfishness to withhold from a general knowledge the effectiveness with which this desirable and harmless agent answers this purpose.

None of the objections that hold good and lessen the value of other agents of this class apply to liquorice root. Gelatin and white of eggs hasten the deterioration of syrups, and soap bark, the most effective substance, has attached to it the partly merited stigma of being poisonous, and the undeniable quality of an active irritant.

It seems strange that the fact that liquor-  
ice root has this property should have

escaped the notice of the many bright druggists who are constantly investigating for the purpose of improving formulas and processes, and more especially in the case of a formula that is confessedly so defective in the matter of a foam-making constituent as that of the soda water syrups. And these druggists, too, are the men who are willing to share their knowledge with their fellows.

Although I have access to all the leading pharmaceutical journals, and have not seen any reference to this application of the fluid extract in question, yet my assumption that it is a new discovery may be, after all, only an oversight or a defective search of that which has been published before, for in these days it is a difficult matter to bring to light anything that is absolutely new in use, application or theory.

R. J. FRITZINGER.

**R. J. FRITZINGER.**

PHILADELPHIA, PA.

## New York Notes.

**Percy Magnus of the Crown Perfumery Co., New York has returned to his desk from an extended trip to Chicago and the World's Fair.**

**Oscar G. Kalish, who has been associated with R. Hudnut at 925 Broadway since its opening, has severed his connection with that firm. Mr. Kalish will continue his connection with the profession in this city.**

Suit has been entered in the City Court on behalf of Joseph Siegmann, of 213 5th street, through his lawyer, Louis Steckler, to recover \$2,000 damages from H. M. Barnes, druggist, of Madison avenue and 110th street, for an assault. Siegmann was discharged, but declined to leave unless a week's wages was paid, and for his refusal to get out of the store he claims that Mr. Barnes forcibly ejected him.

The Euphonic Club, a social organization of the employees of the Fraser Tablet Triturate & Manufacturing Co., had its annual outing to Woodside, L. I., last Saturday afternoon and evening. The members of the club turned out in full force and with their friends made a party of nearly a hundred. A very pleasant afternoon was spent in games and sports and the evening was occupied till a late hour in dancing. Messrs. Bender & Powers pleased the company with their rendering of several solos. The officers of the club are: President, Jere. J. Powers; vice-president, Chas. F. Antz; secretary, Peter Kuhn; treasurer, John P. Bender; Sergeant-at-Arms, Henry Kappmayer.

The reception committee were : Harry A. Levison, John J. Kane, John Schilld, William W. Vohrees, Richard Von Rottenfeld, Theo. M. Millspaugh, J. Maxwell MacDonald. The duties of floor manager were admirably conducted by Jerome C. L. Dauphin assisted by Walter B. Woodward.

**New York State News.**

**Charles W. Howe, the druggist, is now at his new store in Barker block, Rochester.**

George W. Shaw has sold his drug store at East Rochester, N. H. to John L. O'Donnell.

Burglars entered the drug store of G. Arthur Cole, Gloversville, and goods valued at \$50 were stolen.

Burglars blew open the safe of Druggist Muchmore, of East Hampton, L. I., and carried off \$3.15.

The large office building of the DeLand Chemical Works, in Fairport, will shortly be ready for occupancy.

William A. Speck, junior member of the firm of Speck Bros., Haverstraw, and Miss Lillie D. Robinson were recently married.

Barney Gertzen, who was some time employed at Zeiser's drug store, will open a drug store on the corner of Jackson and Second streets, Troy, N. Y.

H. G. Davenport, formerly proprietor of a drug store on Twenty-third street, Troy, has accepted a position as prescription clerk at Glass & McBain's store, in place of Bernard Gertzen, who has purchased a business in South Troy.

Dr. Hiram Eddy, formerly of the Winsted Opera House drug store, Winsted, but for the past three years proprietor of a drug store on Union avenue, Kingston, N. Y., has sold his drug store there, and will, it is said, remove to Brooklyn, N. Y.

## With the Advertisers.

### Pepsin-Byk.

This pepsin, the product of Dr. Henry Byk, of Berlin, has been examined by H. Helbing and Dr. F. W. Passmore, who embody the results in No. XIV. of the *Pharmacological Record* under the title "The Pepsine Controversy." Two preparations were examined, *vis.*: Pepsine Ph. Br. and Pepsin Ph. G. III., and it was developed that in addition to meeting all the requirements of both pharmacopœias, the preparations were distinctly superior, and this, in view of the fact that the requirements of the new "Arzneibuch für das Deutsche Reich" are very stringent, says much for the excellent character of Pepsin-Byk.

Concluding their observations on the result of the examinations, the editors remark that the practice of manufacturers in attributing high values to concentrated preparations without stating the conditions under which the pepsine is capable of dissolving such large proportions of albumen, cannot be too strongly condemned. It is evident that a preparation such as a 1:1000 is able to digest much larger quantities of albumen in a finer state of condition and under more favorable conditions, irrespective of the extension of the period of digestion from one hour to four or six hours, as is frequently the case. One hour is a convenient time for the comparison of the strength of pepsines; half an hour is too short, as the digestive action appears to take a little while to develop its full vigor.

The advantage of a soluble preparation of official strength can also not be too highly appreciated by the chemist, in consideration of the convenience it presents in the manufacture of soluble pepsine preparations. At the same time it is ridiculous to maintain that the soluble ferment is the only valuable portion of a pepsine preparation, for it is observed that the more concentrated preparations contain an increased amount of insoluble matter.

Finally, the agreeable odor of these preparations forming so strong a contrast to most commercial pepsines is the crowning evidence that the preparations of Pepsin-Byk are of an exceptionally high character and unsurpassed in purity and strength.

The agency for Pepsin-Byk in the United States and Canada has been granted to Menn & Stubenrauch, wholesale and manufacturing pharmacists, 83 John street, New York, who are also agents for Auerbach's Peptonized Infant Food and Perrier et Cie.'s French Perfumes.

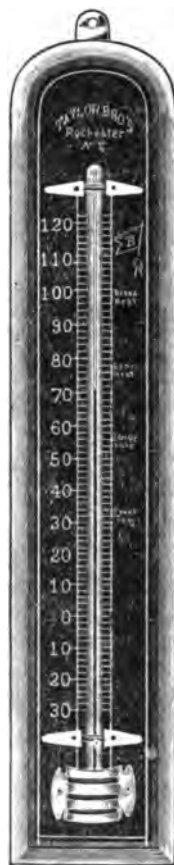
### How to Dispose of Unsalable Patents.

Druggists who complain of having to keep a surplus stock of patent medicines and whose shelves are covered with the years' accumulations of different "cure-alls," need complain no longer, and may use

their shelves to better purposes. Ashton M. Boney, drug broker, 28 Gold street, New York, exchanges drugs and sundries for staple patent medicines, and is prepared to relieve druggists of much of their dead stock. Reference to our advertising columns and communication direct with Mr. Boney will bring out additional information regarding this method of avoiding the accumulation of dead stock.

### Black Scale Thermometers.

Taylor Brothers Company, Rochester, N. Y., who are widely known as manufacturers



TAYLOR'S BLACK SCALE.

of thermometers and similar goods, are introducing a thermometer having a black oxidized scale which is superior in many respects to the ordinary designs. The above illustration shows the general appearance of the thermometer, which is catalogued as "Black Oxidized Scale." The special advantages claimed for this thermometer are: (1) The degree marks are wide apart and easily distinguished. (2) A change of temperature is more quickly detected.

### The Assay of Alkaloidal Drugs.

Sharp & Dohme, manufacturing chemists and pharmacists of Baltimore, Md., announce the fact that they have adopted the method of titration with volumetric acid as a standard of assay in the estimation of alkaloidal drugs.

It is now generally admitted by authorities on both sides of the Atlantic that the gravimetric method of assay alone, as heretofore generally in use for assaying alkaloidal drugs and galenical preparations, gave results which were not very accurate, as the weighed alkaloids were contaminated to a varying degree with impurities which often could not be removed by the process employed. By the additional method of titration with volumetric acid solution, after careful extraction of the alkaloids, the actual percentage of pure alkaloids present can be definitely determined. The method depends for its usefulness upon the fact that every alkaloid whose molecular weight is known will neutralize a definite quantity of decinormal acid solution; for instance, in the case of coca leaves, the molecular weight of cocaine being 303, each c.c. of decinormal acid used to neutralize the crude alkaloidal residue would indicate 0.0303 gramme of cocaine. When several alkaloids possessing different molecular weights are present it is customary to assume that the mean of the latter will represent the true molecular weight. Thus 1 c.c. of decinormal acid solution is equivalent to 0.0364 gramme of nux vomica alkaloids (364 being the mean between 334 and 394, the molecular weights of strychnine and brucine respectively).

### Pumice Stone.

A mine of pumice stone exists on the Teneriffe Peak, of which the working was only started in 1888. The stone is found in that part of the peak called the "Canadas," at about 2,000 feet above sea-level, which has an area of some 6,000 hectares, out of the middle of which rises the highest part of the peak. The Russian consul at St. Croix bought this property of the Spanish Government in consideration of an annual payment for the pumice stone working. The Russian consul has associated himself with a Belgian, and they, under the firm styled Aguilar and Valcke, commenced operations in 1888, but it was only last year that exportation was really started. At the Paris exhibition, the Consul-General states, this stone obtained a silver medal, and in view of the requirements of England, France and America, he believes it will develop a trade of great importance before many years. So far the Lipari Islands have practically furnished the world's supply of this product, exporting about 100,000 tons per annum. The Teneriffe stone being recognized as of excellent quality, and its extraction being of a much more simple matter than in the Lipari Islands, it follows that the price is much less.

**Congress of Woman Pharmacists.**

At the Congress of Woman Pharmacists held recently in Chicago papers were read as follows: "The Progress of Chemistry," A. E. P. Cummings, Highland Park, Ill.; "The History of Pharmacy," Mrs. Mary Blahnik, Chicago; "English Women as Pharmacists," Mrs. Clark Keer, England; "Women Pharmacists in Public Institutions," Miss Jean Gordon, Chicago, and "Women and Pharmacy in England," Rose Minehull, London. There was a very good attendance and the papers were well received. The Congress was presided over by Mrs. Ida Hall Roby.

**Nebraska Notes.**

S. G. Wright & Co., of Table Rock, Neb., have moved into their new brick storeroom in the Opera House block.

Harry Tincer, who recently sold his drug business at Pawnee City to T. A. Davis, of Oakdale, has opened up a new stock at Odell, Neb.

It was found necessary to call a physician to save the life of a child at Nebraska City, who was suffering from partaking too freely of Piso's Cure for Consumption.

Traveling men report the drug trade good in the eastern portion of the State.

Druggists in the western part of the State have been buying Paris green by the barrel; selling as much as 50 and 100 pounds to a single man to be used as an insecticide.

**NOTES ON PRICES.****CHEMICALS.**

In the prices currents of Powers & Weightman and Rosengarten & Sons, manufacturing chemists, Philadelphia, few changes are recorded. Apioi is quoted at an advance, while Acetanilid, German Lactucarium and Mercury have declined.

The Roessler & Hasslacher Chemical Co. New York, issue their monthly prices current under date September 1. No price changes are to be noted, but reference is made to the fact that Acetanilid is among the new additions to the seventh decennial revision of the U. S. Pharmacopœia and that their product meets all the requirements. Chloroform U. S. P. now refers to the chemically pure variety only, as Commercial Chloroform has been dismissed.

**Review of the Wholesale Market.**

NEW YORK, September 6, 1893.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

The narrow basis on which business has been conducted by consumers during the past month has served to deplete stocks at consuming points; but a reaction from this cautious policy has set in and there is now a disposition on the part of consumers to increase their supplies, with the result that during the past week jobbing houses have been kept more than usually busy with out-of-town orders. This improvement in demand has contributed to a stronger feeling among the principal holders and will undoubtedly bring about higher prices on a few of the more staple goods. No important change of prices is to be noted since our last report. Cream Tartar and Tartaric Acid have been reduced one-half cent per pound by manufacturers. Oils Rose and Lemon are firmer. Opium has advanced.

**DRUGS.**

ALCOHOL remains steady at \$2.24 @ \$2.26 with a moderate business within the range  
ARNICA FLOWERS continue to offer at 10½ @ 12½c.

BALSAM COPAIBA continues to arrive from primary sources, but as there is a steady moderate demand from jobbers and manufacturers, there is no undue accumulation of stock. The sales of Central American are making at 34 @ 36c.; Maranham, 42½ @ 45c.; Para, 42 @ 43c., and Solidifiable, 50 @ 53c.

BALSAM FIR continues to offer at about \$2.45 for old crop Canada. The demand, however, is limited.

BALSAM PERU is held with increased firmness though values are nominally unchanged. There is quoted \$1.35 @ \$1.50 as to quality and seller.

BALSAM TOLU has met with fair attention, recent transactions being at 23c.

BARK, SOAP, continues to offer at 3½ @ 4c. for whole and 4½ @ 4¾c. for crushed, with a moderate business within this range.

BUCHU LEAVES, short, continue moderately active in a jobbing way, though holders are disposed to sell only in small lots, in anticipation of an early betterment of prices.

CANTHARIDES are meeting with very little attention at the moment; sales making within the range of, say, 28 @ 30c. for whole Chinese and 32 for powdered, as to quality. For Russian 70 @ 80c. is asked.

CASSIA BUDS are developing a firmer tendency and offerings are made with some reserve upon the basis of 18 @ 18½c.

CHAMOMILE FLOWERS are moving out quite freely in small quantities, new German realizing 20 @ 25c. as to quality. Roman are active owing to recent advances at primary sources and the likelihood of higher values here.

COD LIVER OIL is in good demand for consumptive and jobbing needs. Prime new has sold freely, among recent transactions being 50 bbls. at \$18.75. The stock of old is about exhausted.

CUBEB BERRIES are meeting with very little attention at the moment, but values remain unchanged. We quote Ordinary 22½ @ 25c., X and XX 27 @ 30c.

CACAO BUTTER, Dutch, continues to offer at 32½c., with a moderate inquiry.

CUTTLE BONE has received more attention during the week, and among recent sales are included 20 straps at 11½c. The nominal quotations are 11¼ @ 12c. for Trieste, and Bari 10c.

ERGOT is in moderate request, with sales of Spanish at 45 @ 47½c., and German 38 @ 40c.

GUARANA continues to offer at \$1.05 @ \$1.10, though little inquiry is experienced

INSECT POWDER has met with considerable attention during the week. Flowers are quoted 17 @ 21c. and powder 16 @ 22c.

MORPHINE, domestic, remains \$1.90 for bulk and \$2.30 for eighths, and is finding a fair outlet at these values.

OPIMUM is working into stronger position, having sold recently at an advance on previous values. Single case lots are now quoted at \$2.45 @ \$2.50, and in some cases holders are asking more money. The price for jobbing lots is stated at \$2.50 @ \$2.55½, while powdered is firmer at \$3.25.

QUININE is in improved position, there being a better demand for both foreign and domestic. The former continues to be quoted 17½ @ 18½c., the first-mentioned being an inside cash price for 5,000 ounce lots. Quoted nominally 18 @ 18½c., P. & W. is maintained firmly at 22 @ 29c. as to size and style of package.

The bark sale at Amsterdam on the 30th ultimo went off at about 25 per cent. lower than the previous sale.

SPERMACETI continues dull; purchases can be made at the range of 26 @ 27c. for block, and 30 @ 31c. for cake.

SUGAR OF MILK, powdered domestic, continues to offer and sales are making at 12 @ 14c. as to quantity.

TONKA BEANS are firmer, though without quotable change in price.

VANILLA BEANS continue to show an advancing tendency. We are reported sales of Mexican cut at \$4.50 @ \$6.50 as to quality. Bourbon is held at \$3 @ \$8.

WAX, Japan, continues held at 8 @ 8½c. with a moderate business within this range.

**DYESTUFFS.**

BICHRIMATE OF POTASH is in steady moderate request, with the sales at 10½ @ 11c.

CUTCH, SM, continues inactive with the market steady at about 4¼ @ 4¾c.

DIVI DIVI has remained quiet during the week, the few sales reported being within the range of \$45 @ \$55.

GAMBIER is in moderate demand, with some sales made within the range 3¼ @ 4¼c., according to quantity.

INDIGO has been inquired for to some extent and ruled firm at full previous values.

MADDER, Dutch, continues dull, and nominally unchanged.

NUTGALLS, blue Aleppo, are selling moderately well on the basis of 13¼ @ 14c.

SUMAC, Sicily, is held more firmly, though unchanged from \$65 @ \$72.50 as to quantity

**CHEMICALS.**

ACETIC ACID is maintained firmly at 1½ @ 2c.

ARSENIC, white, continues in fair demand and held at 3½ @ 3¾c.

BLEACHING POWDER has met with fair inquiry, with sales of English at the range of 2¼ @ 2½c. German continues held at 2.05c.

BLUE VITRIOL is moderately active and steady at 3¼ @ 3½c. as to brand and quantity.

BORAX is in steady moderate request, but the transactions have been mainly in jobbing lots, there being a continued absence of demand for round quantities. Prices firm and unchanged.

BRIMSTONE, crude seconds, is quiet. Quoted nominally \$18.25 @ \$18.50.

CARBOLIC ACID is neglected at the moment, but prices are unchanged.

CAUSTIC SODA is firmer though not quotably higher. Among recent sales are included 25 drums 74 per cent. at \$2.82½c.

CHLORATE OF POTASH continues held at 15 @ 15½c. for crystals and 15½ @ 15¾c. for powder with a fair business reported.

CITRIC ACID continues inactive. The price remains 45½ @ 46c. for kegs and barrels respectively.

CREAM TARTAR is passing out in round lots at the range of 18½c. for crystals in casks and 19c. for powdered in barrels.

MERCURIALS are selling moderately at full previous prices.

NITRATE OF SILVER continues held at the range of 48 @ 49½c.

OXALIC ACID continues in moderate request with the quotation 6½ @ 6¼c.

SAL SODA continues held at the range of \$1.02½ @ \$1.05 for English, and 90 @ 95c. for domestic.

SODA ASH, 45 per cent. carbonated, is in fair demand; sales within the range of \$1.50 and \$1.80.

TARTARIC ACID continues jobbing at 22½c. for crystals, and 23c. for powdered.

#### ESSENTIAL OILS.

ANISE has ruled quiet during the week, but there has been no change in price, \$1.35 @ \$1.40 being yet required.

BERGAMOT is ruling firm at the recent advance.

CAJUPUT continues held at 45 @ 55c. for native.

COPAIBA is meeting with moderate inquiry at full previous prices. We quote the range at 70 @ 75c. as to quality.

CASSIA is fairly active with the current sales at 75 @ 82½c.

CLOVE continues quiet but steady at 52½ @ 55c.

CUBEB has eased off a trifle and is now offering at \$2.25 @ \$2.50.

GERANIUM remains quiet, with the quotations at \$4.50 @ \$7.50 as to brand and quantity.

LEMON and ORANGE are jobbing fairly within the previous range.

PEPPERMINT has developed no new feature. HIGH is less firm with \$2.50 asked and a disposition to shade this figure on a close bid for quantity lots. Bulk offers at \$2 45 @ \$2 55.

ROSE continues held at \$7 50 @ \$8.

SANDALWOOD is in very light supply and held firmly at \$2.85.

SASSAFRAS, pure, continues dull, without, however, any quotable change in price.

WINTERGREEN remains quiet at nominally unchanged prices.

#### GUMS.

ASAFETIDA has been fairly active in the interval, and we are reported sales of 10 cases London at 10 @ 20c.

ALOE, Curacao, has been in good demand for export, 300 boxes at 2¼ @ 3c. being included among recent sales. We quote the range at these figures.

CAMPOR is receiving very little attention at the moment, though prices are as last quoted.

CHICLE is still on the down grade and offering quite freely at 26 @ 28c.

GAMBOGE is in limited jobbing inquiry at 55 @ 60c.

GUAIAC remains quiet but steady at 17 @ 25c.

KINO is without quotable change.

MYRRH is generally held at 20 @ 38c. as to quality and quantity.

SENEGAL does not change from 14 @ 60c. for picked and 9½ @ 10c. for sorts.

SHELLAC is firm, though the market continues dull and prices nominally unchanged. Calcutta and London are cabled steady at previous prices.

TRAGACANTH is well sustained at 30 @ 58c. for Aleppo as to quality and quantity.

#### ROOTS.

ACONITE, ALKANET and ALTHAEA remain quiet at nominally unchanged prices.

CALUMBA is jobbing fairly at the range of 6½ @ 11c. as to quality.

DANDELION, German, continues held at 7½ @ 8c.

GENTIAN is in fair consumptive demand

at 4c. for whole and 6c. for powder. The stock is well concentrated.

GINGER, unbleached Jamaica, is offering at 14 @ 17c.

GOLDEN SEAL is held steadily at 20 @ 21c. for spot

IPKAC is yet held at \$1.27 @ \$1.30, but the demand is limited to jobbing quantities.

JALAP is inactive at 21 @ 24c.

RHUBARB has been in active demand since our last report, and fully 4,000 lbs. have gone into channels of consumption upon the basis of 30 @ 80c. for whole and 25 @ 70c. for powdered.

SARSAPARILLA, Mexican, is developing a firmer tendency, and is now quoted generally at 10c.

SENEGA, new crop, is in good supply and offering at 35 @ 36c.

SNAKE is nominally unchanged.

VALERIAN, German, does not offer below 10 @ 13c.

#### SEEDS.

ANISE, Italian, sifted, has sold in a quantity way at 9 @ 10c., a recent transaction being 30 bags at the outside figure.

CANARY, Smyrna, is dull and nominally unchanged at 2½ @ 2¾c.

CARAWAY, Dutch, is finding sale within the range of 6½ @ 7c.

CELERY is irregular with numerous small sales at 10¼ @ 11c.

CUMMIN has met with considerable inquiry for export, but the stock in this market is almost exhausted; small sales at quotations.

FENNEL, German, remains quiet, but the market appears well sustained at 12c.

MUSTARD, California yellow, is dull though nominally unchanged.

POPPY, QUINCE AND RAPE are fairly steady on the basis of quoted prices.

## Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted free of charge. Write distinctly, on one side of paper only, and do not use postal cards.*

#### POSITIONS VACANT.

A representative for North America, also one for South America is wanted by a chemical pharmaceutical manufacturer in Berlin. Address offers to I. G., 657a, care Rudolf Moese, Berlin, S. W. (Germany).

#### POSITIONS WANTED.

POSITION WANTED—Competent clerk (an) desires a permanent position in the country, New England States or New York; willing and obliging; 4½ years' experience; A1 references as to general character; salary \$14. Edward C. Bell, Far Rockaway, Queens Co., L. I.

POSITION WANTED by a manufacturing chemist; a large and thorough experience with pharmaceutical and chemical preparations; satisfactory reference given. Address "Chemist," care of AMERICAN DRUGGIST, 37 College place, New York.

GRADUATE of N. Y. C. P. wants position as clerk in good drug store (Southern N. Y. or Northern Penn. preferred); will be open for engagement Sept. 15; "A1" references. Address "C. D. B.," care of A. J. Pratt, Westville, Otsego Co., N. Y.

WANTED—Position pharmacist; registered in Minnesota; salary \$75; best reference. Address "Druggist," Crook's Pharmacy, W. Duluth, Minn.

JUNIOR DRUG CLERK, with 2 years' city and country experience, desires to make a change; good habits; moderate wages; night work preferred. Address "Agathin," 571 Clermont avenue, Brooklyn, N. Y.

DRUG CLERK, German-American, registered; best references. "Salicin," No. 21 Troutman street, Brooklyn.

DRUG CLERK—American, middle aged, N. Y., licentiate, twenty years' experience city and country good business qualifications. desires permanent situation in country at moderate salary; Western New York preferred. Address for ten days, "Pharmacist," General Delivery, Bath, Steuben County, N. Y.

DRUGGIST—Junior, a young man 19, wishes permanent position city or country; has had 1½ years' experience in first-class stores; best of reference from last employer. Address Harry Travers, Box 38, Argyle, Washington County, N. Y.

WANTED—Position as manager or "head clerk" in first-class pharmacy; license in New York State; temperate; 6 years' experience; A No. 1 references; Address, stating terms, hours, etc., "Trehalum," 135 Murray street, Binghamton, N. Y.

WANTED—Situation as distributing advertising agent; for some reliable company to distribute and post advertising matter; will also call on the trade if wanted; would prefer to travel through the Western States; I have had good experience in this work for prominent Chicago house, to whom I can refer; have also had drug experience with reliable firm of this State, to whom I can refer as to my ability, etc.; moderate salary expected; can furnish bond if required. Address M. W. Walters, Bettsville, Ohio.

POSITION WANTED—Employment is desired by a drug clerk with 1½ years' experience in the retail business, both as dispenser and salesman, also in the laboratory; registered in Massachusetts and Rhode Island. Address "Excipient," care West's pharmacy, Providence, R. I.

RELIEF CLERK—A young man, thoroughly competent, 26 years of age, strictly temperate. A No. 1 salesman, 7 years' practical experience and with the best of references, is prepared to do relief work for any length of time. Address "C. E. B.," 63 Royal street, Lowell, Mass.

#### BUSINESS OPPORTUNITIES.

FOR SALE.—We have for sale a large number of drug stores in various parts of the country. Before buying consult us. No charge to purchasers. The Pharmaceutical Exchange Bureau, 1501 Arch St., Philadelphia, Pa.

DRUG STORE in Jersey City; net profits \$1,800 per year; will take \$1,800 cash; rare bargain; satisfactory reason. "Pepin," AMERICAN DRUGGIST, 37 College place, New York.

FOR SALE—Best paying corner drug store in outskirts of Denver; old prescription file more than pays rent (\$25 month); average daily sales for last 18 months about \$15; if you have about \$2,000 cash, and want an established business together with a change of climate, this is your chance; best reasons for selling. Address "Oryza Sativa," Denver, Col.

DRUG STORE FOR SALE—Stock and fixtures in the growing town of Basley, S. C.; stock is clean and fresh, just one year old; will sell half interest; my only reason for selling is ill health. Address J. F. Bruce, Basley, S. C.

DRUG STORE for sale in Northern Pennsylvania; good chance for young doctor; reason for selling, ill health. Address S. M. Stevens, Mills, Potter County, Pa.

FOR SALE—A drug store in a good growing town in Pennsylvania; no opposition; price \$2,000, one-fourth cash, balance in one year with interest to be secured by note with two securities; must sell at once. Address "Reva," care AMERICAN DRUGGIST, 37 College place.

FOR SALE—Drug store in Northern Pennsylvania; good location for physician; reason for selling, sickness. Address S. M. Stevens, Mills, Pa.

Clerks and Employers should call at this office, register their wants and examine our list of POSITIONS WANTED POSITIONS VACANT and BUSINESS OPPORTUNITIES, which can be consulted free of charge.

Kindly mention this Journal when writing to Advertisers.

# ORIGINAL PACKAGE PRICES.

It should be understood that the prices quoted in this column are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a considerable range of prices.

| Drugs, Chemicals, &c.       |          |   | Codeine, eights.....       |         |         | Nux Vomica, lb.....        |          |      | Cardamon, Malabar,       |         |   |
|-----------------------------|----------|---|----------------------------|---------|---------|----------------------------|----------|------|--------------------------|---------|---|
| Acetanilid, bulk, per lb.   | .38      | 0 | 4.65                       | 0       | ...     | .03 1/2                    | 0        | ..04 | per lb.....              | .75     | 0 |
| Acetanilid, per lb.         | .41      | 0 | Cod Liver Oil, Nor-        | ...     | ...     | Nutgalls, China, per lb.   | .13      | 0    | Colchicum, lb.....       | .12     | 0 |
| Acetanilid, per oz.         | .06 1/2  | 0 | wegian, bbls.....          | 18.50   | 22.50   | Aleppo, per lb.....        | .13 1/2  | 0    | Coriander, lb.....       | .08 1/2 | 0 |
| Acetate of lime:            |          |   | Colocynth:                 |         |         | Oils, Essential:           |          |      | Cumin, lb.....           | .11     | 0 |
| Brown, per 100 lb.....      | .90      | 0 | Trieste, lb.....           | .30     | .38     | Anise.....                 | 1.35     | 0    | Fennel, Germ., lb.....   | .12     | 0 |
| Gray, per lb.....           | .01 1/2  | 0 | Spanish.....               | .80     | .88     | Almonds, Bitter.....       | 7.50     | 0    | Flax Meal, per lb.....   | .08     | 0 |
| Acids:                      |          |   | Copperas, per 100 lb.....  | .75     | .90     | Bay, per lb.....           | 3.50     | 0    | Foenugreek, lb.....      | .08 1/2 | 0 |
| Acetic Com'l.....           | .01 1/2  | 0 | Cr. Tartar, Crystals, lb   | .18 1/2 | .19     | Bergamot.....              | 2.00     | 0    | Hemp, Russian, lb.....   | .08 1/2 | 0 |
| Aquaforis, 36 deg.....      | .03 1/2  | 0 | Powdered, lb.....          | .19     | .20     | Cajeput, Native.....       | .45      | 0    | Mustard, yel. Cal. lb.   | .06 1/2 | 0 |
| " 40.....                   | .04 1/2  | 0 | Cubeb Berries, XX, lb.     | .27     | .30     | Camphor.....               | .07      | 0    | Mustard, brown, Cal.     | .03 1/2 | 0 |
| Benzole, German.....        | .47      | 0 | Ordinary, lb.....          | .22 1/2 | .25     | Cassa.....                 | .75      | 0    | Poppy, per lb.....       | .07 1/2 | 0 |
| " English.....              | .49      | 0 | Cutch, bales, SM, lb.      | .04 1/2 | .04 1/2 | Citronella, Native.....    | .84      | 0    | Quince, German, lb.....  | .45     | 0 |
| Boric, Whole.....           | .13 1/2  | 0 | Cutch, boxes lb.....       | .09     | .09     | Clove.....                 | .52 1/2  | 0    | Rape, German, lb.....    | .03 1/2 | 0 |
| " Powdered.....             | .13 1/2  | 0 | Cuttle bone, Trieste, lb   | .12     | .12     | Copaiba.....               | .70      | 0    | Rape, English, lb.....   | .05 1/2 | 0 |
| Citric, American.....       | .45 1/2  | 0 | Jewelers' lb.....          | .35     | ...     | Croton.....                | .75      | 0    | Soap, Castile, Mara,     |         |   |
| " English.....              | .46      | 0 | Dextrine.....              | .04 1/2 | .05     | Cubeb.....                 | .25      | 0    | mottled, pure, lb.....   | .06     | 0 |
| Carbolic Crystals.....      | .13 1/2  | 0 | Divi Divi, per ton.....    | 45.00   | 55.00   | Erigeron, per lb.....      | 1.45     | 0    | White, lb.....           | .09 1/2 | 0 |
| bulk.....                   | .13 1/2  | 0 | Dragon's B'd, lump, lb     | .45     | ...     | Geranium Chris.....        | 4.50     | 0    | Soda Ash, lb., 48 per    | 1.50    | 0 |
| lb. bottle.....             | .80      | 0 | In reeds, lb.....          | 1.00    | 1.10    | Lavender.....              | 1.80     | 0    | 100 lb.....              | 1.80    | 0 |
| Muriatic, 18.88 deg.....    | .90      | 0 | Epsom Salts, per 100 lb.   | 1.00    | 1.10    | " Garden.....              | .40      | 0    | Squilla, white, lb.....  | .04 1/2 | 0 |
| Nitric, 36 degrees.....     | .04 1/2  | 0 | Ergot:                     |         |         | Lemon, as to brand.....    | 1.35     | 0    | Sugar Milk, powd., lb.   | .12     | 0 |
| " 40.....                   | .04 1/2  | 0 | G'm'n and Russ'n, lb.      | .58     | .40     | Lemongrass.....            | .75      | 0    | Sugar Lead, white, lb.   | .11     | 0 |
| Oxalic, English.....        | .06 1/2  | 0 | Spanish, lb.....           | .45     | .47 1/2 | Musk, per lb.....          | 7.00     | 0    | Lead, brown, lb.....     | .05 1/2 | 0 |
| " German.....               | .06 1/2  | 0 | Ergotine, Domestic.....    | 4.00    | ...     | Myrrane.....               | .17      | 0    | Sulphate Ammonia, per    | 1.00    | 0 |
| Picric.....                 | .26      | 0 | German.....                | 4.00    | ...     | Nyrol.....                 | .29.00   | 0    | 100 lb.....              | 2.90    | 0 |
| Salicylic.....              | 1.00     | 0 | Flowers:                   |         |         | Nutmeg.....                | 1.75     | 0    | Do. Potash, 48 per       | 1.25    | 0 |
| Sulphuric.....              | .15      | 0 | Arnica Flowers, per lb     | .11     | .12     | Orange.....                | 1.90     | 0    | lb.....                  | 1.25    | 0 |
| Tartaric, Crystals.....     | .25 1/2  | 0 | Chamomile.....             | .18     | .25     | Origanum.....              | .84      | 0    | Do., Potash, 90 per      | 2.25    | 0 |
| " Powdered.....             | .23      | 0 | Roman, New.....            | .12     | .24     | Pennyroyal.....            | 1.40     | 0    | lb.....                  | 2.25    | 0 |
| Tannic.....                 | 1.05     | 0 | Roman, lb., old.....       | .12     | .20     | Peppermint, bulk.....      | 2.45     | 0    | Sulphur, Roll.....       | .20     | 0 |
| Alcohol, Grain, per gal.    | 2.25     | 0 | Lavender Flowers           |         |         | " HGH.....                 | 2.50     | 0    | Flour.....               | .20     | 0 |
| (Less rebate.)              |          |   | Ordinary, per lb.....      | .04     | .08     | Rose.....                  | 7.50     | 0    | Spirits Nitre, U. S. P.  | .39     | 0 |
| Wood, 95.07.....            | 1.40     | 0 | Select, per lb.....        | .15     | .65     | Sandalwood.....            | .25      | 0    | Spirit Ammonia, Arom.    | .44     | 0 |
| Alcoholene.....             | .10      | 0 | Gambier, lb.....           | .04     | .04 1/2 | Sassafras, Artificial..... | .36      | 0    | Sulphuric Ether.....     | .54     | 0 |
| Alum, Lump, per 100 lb.     | 1.75     | 0 | Glycerin, bbls, lb.....    | .13 1/2 | .14     | Sassafras, Artificial..... | .24      | 0    | Sumac, Sicily, ton.....  | 70.50   | 0 |
| Ground, per 100 lb.....     | 1.85     | 0 | " cases, lb.....           | .14     | .16 1/2 | Spearment.....             | 1.50     | 0    | Virginia.....            | 43.00   | 0 |
| Antifebrine, per oz.....    | .10      | 0 | Grains, Paradise, lb.....  | .07     | .07 1/2 | Tansy.....                 | 2.00     | 0    | Tar Barbadoes, gal.....  | .47.50  | 0 |
| Antipyrine, per oz.....     | 1.20     | 0 | Guarana, lb.....           | 1.05    | 1.10    | Wintergreen.....           | 1.65 1/2 | 0    | Tin Crystals, bbls., per | .25     | 0 |
| Arrow root, Berm., lb.      | .24      | 0 | Gums:                      |         |         | Artificial.....            | 1.10     | 0    | lb.....                  | .25     | 0 |
| St. Vincent, in bbl, lb.    | .11      | 0 | Aloes, Barb, lb.....       | .06     | .12     | Wormwood.....              | .25      | 0    | Jara, per lb.....        | .17     | 0 |
| Arsenic:                    |          |   | " Cape, lb.....            | .05 1/2 | .08     | Opium, Natur'l, ca., per   | ...      | 0    | Tonka Beans, Angost.     | 1.65    | 0 |
| Red Saxon, lb.....          | .05 1/2  | 0 | " Curacao, lb.....         | .05 1/2 | .03     | lb.....                    | 2.45     | 0    | lb.....                  | 1.65    | 0 |
| White.....                  | .05 1/2  | 0 | " Socotrine, lb.....       | .05 1/2 | .03     | Opium, Ordinary.....       | 2.45     | 0    | Tonka Beans, Para, lb.   | .55     | 0 |
| Balsam, Copaiba, lb.....    | .30      | 0 | " and.....                 | .50     | .55     | Jobbing, per lb.....       | 2.50     | 0    | " Surinam.....           | .75     | 0 |
| Fir, Canada, gal.....       | 4.45     | 0 | Arabic, sorts.....         | .12 1/2 | .13     | Opium, Powd., per lb.....  | 3.25     | 0    | Turpentine, Spirits..... | .31     | 0 |
| Fir, Oregon, gal.....       | .75      | 0 | Asafetida, lb.....         | .10     | .20     | Phenacetine, per oz.....   | .85      | 0    | Vanilla Beans, lb.....   | 6.00    | 0 |
| Peru, lb.....               | 1.35     | 0 | Benzoin, lb.....           | .30     | .38     | Prussiate Potash, Yel-     |          | 0    | cut, lb.....             | 4.50    | 0 |
| Tolu, lb.....               | .23      | 0 | Chicle, lb.....            | .26     | .26     | low, per lb.....           | .21 1/2  | 0    | Venice Turpentine, bar-  | .18     | 0 |
| Bark, Buckthorn, per lb.    | .10      | 0 | Gamboge, lb.....           | .55     | .60     | Red, per lb.....           | .39      | 0    | rels, lb.....            | .10     | 0 |
| Cascara Sagrada, lb.....    | .07      | 0 | Guaiac, lb.....            | .17     | .25     | Quickilver, flasks, per    | .17      | 0    | Cans, lb.....            | .10     | 0 |
| Elm, lb.....                | .19      | 0 | Kino, lb.....              | .75     | 1.00    | lb.....                    | .50      | 0    | Wax, Brazil, Veg., lb.   | .09 1/2 | 0 |
| Orange peel.....            | .06      | 0 | Mastic, lb.....            | .75     | 1.00    | Quinine:                   |          | 0    | Japan, lb.....           | .08     | 0 |
| Sassafras, per lb.....      | .08      | 0 | Myrrh, lb.....             | .20     | .38     | Domestic, bulk, oz.....    | .22      | 0    |                          |         |   |
| Soap, lb.....               | .04      | 0 | Olibanum, sorts, lb.....   | .05 1/2 | .06 1/2 | Domestic, oz.....          | .28      | 0    |                          |         |   |
| Bicar. Soda, Engl. lb.      | .03 1/2  | 0 | " tears, lb.....           | .11     | .13     | German, bulk.....          | .18      | 0    |                          |         |   |
| domestic, lb.....           | .29      | 0 | Sandrac, lb.....           | .29     | .30     | German, oz.....            | .27      | 0    |                          |         |   |
| Bichromate, Pot'h, lb.      | 1.10 1/2 | 0 | Senegal, picked, lb.....   | .14     | .60     | Roots, Aconite, lb.....    | .09      | 0    |                          |         |   |
| Bismuth, Sub. Nit.,         |          |   | " sorts, lb.....           | .09 1/2 | .10     | Althea, cut, lb.....       | .15      | 0    |                          |         |   |
| per lb., bulk.....          | 1.95     | 0 | Shellac, DC, lb.....       | .51     | .51     | Alkanet, lb.....           | .06      | 0    |                          |         |   |
| Bismuth, Sub. Carb.,        |          |   | " VSO, lb.....             | .30     | .30     | Arnica, lb.....            | .12      | 0    |                          |         |   |
| per lb., bulk.....          | 2.25     | 0 | " Diam'd I, lb.....        | .20     | .20     | Beladonna Ger., lb.....    | .08      | 0    |                          |         |   |
| Bleach'g Powd., per lb.     | .08 1/2  | 0 | " SS, lb.....              | .28 1/2 | .29     | Blood, lb.....             | .05      | 0    |                          |         |   |
| Blue Vitriol, lb.....       | .03 1/2  | 0 | " TN, lb.....              | .26     | .26     | Calamus, lb.....           | .07      | 0    |                          |         |   |
| Borax, refined, lb.....     | .08      | 0 | " Garnet.....              | .24     | .24     | Calamus, bleac'd, lb.      | .21      | 0    |                          |         |   |
| Concentrated, lb.....       | .07 1/2  | 0 | " Bleached, lb.....        | .26     | .27     | Colchicum, per lb.....     | .14      | 0    |                          |         |   |
| Brimstone, best ad, ton     | 10.00    | 0 | Tragacanth, Aleppo, lb.    | .30     | .58     | Colombo, lb.....           | .06 1/2  | 0    |                          |         |   |
| Bromide Potash, Do-         |          |   | Harlem Oil.....            | .20     | .50     | Dandelion, Germ. lb.       | .07 1/2  | 0    |                          |         |   |
| mestic, b'lk, lb.....       | .33      | 0 | Indigo, lb.....            | .45     | 2.00    | Dogwood, lb.....           | .08      | 0    |                          |         |   |
| bottles, lb.....            | .39      | 0 | Insect Flowers.....        | .18     | .20     | Galangal, lb.....          | .04 1/2  | 0    |                          |         |   |
| Bromide Ammonium,           |          |   | Insect Powder, pure, lb.   | .16     | .22     | Gentian, lb.....           | .03 1/2  | 0    |                          |         |   |
| bulk.....                   | .43      | 0 | Iodide Potash, bulk, lb.   | .20     | .27 1/2 | Ginseng, lb.....           | 1.75     | 0    |                          |         |   |
| Bromide Sodium, b'lk..      | .38      | 0 | " bot's, lb.....           | .23     | .68     | Ginger, Jamaica,           |          | 0    |                          |         |   |
| Bromine, bulk.....          | .38      | 0 | Isinglass, Am'r'n, lb.     | .47 1/2 | .60     | blcd., lb.....             | .17      | 0    |                          |         |   |
| Burgundy pitch, per lb.     | .06 1/2  | 0 | Japan, lb.....             | .35     | .35     | Ginger, Jamaica,           | .14      | 0    |                          |         |   |
| Cacao Butter:               |          |   | Juniper Berries, lb.....   | .08 1/2 | .08 1/2 | unblch., lb.....           | .20      | 0    |                          |         |   |
| 1-lb. boxes, lb.....        | .30      | 0 | Leaves:                    |         |         | Hellebore Seal, lb.....    | .20      | 0    |                          |         |   |
| Dutch A., per lb.....       | .34 1/2  | 0 | Belladonna, per lb.....    | .10 1/2 | .12     | Hellebore, powd., lb.      | .07 1/2  | 0    |                          |         |   |
| Caffeine, lb.....           | 1.95     | 0 | Buchu, short, lb.....      | .12     | .15     | Ipecac, lb.....            | 1.27     | 0    |                          |         |   |
| Campbor, ref'd, bbls., lb   | .48 1/2  | 0 | " long, lb.....            | .35     | .40     | Jalap, lb.....             | .21      | 0    |                          |         |   |
| cases, lb.....              | .51      | 0 | Coca, prime, lb.....       | .15     | .30     | Kava Kava, lb.....         | .30      | 0    |                          |         |   |
| Cantharides, Chinese, lb.   | .28      | 0 | Damiana, lb.....           | .27     | .27     | Licorice, select, lb.....  | .08      | 0    |                          |         |   |
| Russian, lb.....            | .70      | 0 | Hyocymus.....              | .09     | .11     | " Pow'd., lb.....          | .05      | 0    |                          |         |   |
| Carb. Ammonia,              |          |   | Jaborandi, lb.....         | .40     | .50     | Lovage, lb.....            | .50      | 0    |                          |         |   |
| cases, lb.....              | .08 1/2  | 0 | Senna Alex natr'l, lb.     | .14     | .16     | Mandrake, lb.....          | .03 1/2  | 0    |                          |         |   |
| Cassia Buds, lb.....        | .18      | 0 | Senna Alexgarbled lb.      | .22     | .27     | Orris, Florentine, lb.     | .25      | 0    |                          |         |   |
| Castor Oil, cases, lb.....  | .15      | 0 | Senna Tinney, lb.....      | .07     | .20     | Orris, Verona.....         | .12      | 0    |                          |         |   |
| Barrels, lb.....            | .14 1/2  | 0 | Stramonium.....            | .05 1/2 | .08     | Pink, lb.....              | .22      | 0    |                          |         |   |
| Caustic Soda, 70%, 100 lb.  | 2.70     | 0 | Licorice, P. & S., lb..... | .24     | .24     | Rhubarb, whole, lb.        | .70      | 0    |                          |         |   |
| Caustic Soda, 60%, 100 lb.  | 2.90     | 0 | Lupulin, German.....       | .70     | .25     | Sarsaparilla, Hond, lb.    | .30      | 0    |                          |         |   |
| Chalk, Engl. Precip.,       |          |   | Lycopodium, lb.....        | .53     | .55     | Sarsaparilla, Mex., lb.    | .09 1/2  | 0    |                          |         |   |
| bulk, lb.....               | .04      | 0 | Manna, large flake, lb.    | .125    | .125    | Senega, lb.....            | .35      | 0    |                          |         |   |
| Chloral Hydrate Cryst-      |          |   | Small flake, lb.....       | .48     | .45     | Serpentaria, lb.....       | .20      | 0    |                          |         |   |
| als, bulk, per lb.....      | .95      | 0 | Menthol, Japanese.....     | 3.70    | 3.70    | Valerian, Belgian, lb.     | .07      | 0    |                          |         |   |
| Hydrate crusts, bulk,       |          |   | Mercurials:                |         |         | " German, lb.....          | .10      | 0    |                          |         |   |
| per lb.....                 | .98      | 0 | Blue Pill, lb.....         | .34     | ...     | Saffron, Amn., lb.....     | .25      | 0    |                          |         |   |
| Chlorate Pot. Cryst., lb.   | .15      | 0 | Calomel, lb.....           | .71     | ...     | Spanish, Valencia, lb.     | 6.50     | 0    |                          |         |   |
| Pow'd, lb.....              | 1.54 1/2 | 0 | Cor. Sublimite, lb.....    | .02     | ...     | Spanish, Alicante, lb.     | 5.00     | 0    |                          |         |   |
| Chloroform, Bulk, lb.....   | .50      | 0 | Mercury and Chalk.....     | .30     | ...     | Sal Ammoniac, lump, lb.    | .08 1/2  | 0    |                          |         |   |
| Cinchonidine, Sulphate      |          |   | Ointment, lb.....          | .30     | .39     | Do. Granulated, lb.....    | .05 1/2  | 0    |                          |         |   |
| of German, oz.....          | .02      | 0 | Red Precipitate, lb.       | .81     | ...     | Sal Soda, Eng., 100 lb.    | 1.02 1/2 | 0    |                          |         |   |
| Citrate, U. S. P. Iron, lb. | .59      | 0 | White.....                 | .86     | ...     | " American.....            | .90      | 0    |                          |         |   |
| Soluble.....                | .55      | 0 | Morphine, bulk, oz.....    | 1.90    | 2.05    | Salt peter, crude, per lb. | .04 1/2  | 0    |                          |         |   |
| Iron and Ammonia, lb.....   | .50      | 0 | Eights, oz.....            | .30     | .35     | Salt peter, Refined, per   | .06      | 0    |                          |         |   |
| Iron and quinine.....       | 1.50     | 0 | Moss, Irish, lb.....       | .06     | .06 1/2 | lb.....                    | .06      | 0    |                          |         |   |
| Iron and strychnine.....    | 2.00     | 0 | Irish, bleached, lb.....   | .13     | .15     | Seeds, Anise, Ital., lb.   | .09      | 0    |                          |         |   |
| Phosphate, U. S. P., lb.    | .57      | 0 | Muriate Potash, per 100    | 1.78    | 1.85    | Anise, German, lb.....     | .06      | 0    |                          |         |   |
| Pyrophos, U. S. P., lb.     | .55      | 0 | lb.....                    | 1.78    | 1.85    | Anise, Star, lb.....       | .22      | 0    |                          |         |   |
| Pyrophos, Soluble, lb.....  | .55      | 0 | Naphthaline, flake, per    | .03 1/2 | .05     | Canary, Smyrna, lb.....    | .34 1/2  | 0    |                          |         |   |
| Potash, per lb.....         | .49      | 0 | lb.....                    | .03 1/2 | .05     | Canary, Sicily, lb.....    | .08 1/2  | 0    |                          |         |   |
| Soda, per lb.....           | .49      | 0 | Naphthaline, Ball, per     | .05     | .05     | Caraway, lb.....           | .06 1/2  | 0    |                          |         |   |
| Gobalt, pow'd, lb.....      | .20      | 0 | lb.....                    | .05     | .05     | Cardamon, Aleppy,          | .65      | 0    |                          |         |   |
| Cocaine Murate, per oz.     | 5.25     | 0 | Nitrate Silver, oz.....    | .48     | .49 1/2 | per lb.....                | .65      | 0    |                          |         |   |
| Cedrine, bulk, oz.....      | 4.15     | 0 | Nitrate Soda, 100 lb.....  | 1.65    | 1.80    | Calery, lb.....            | .10 1/2  | 0    |                          |         |   |

## Animal and Vegetable Oils.

|  |         |   |         |
|--|---------|---|---------|
| Linseed, City, raw, gal.                       | ....    | 0 | .50     |
| Linseed, City, boiled,<br>gal.....             | ....    | 0 | .53     |
| Linseed, Western, raw,<br>gal.....             | ...48   | 0 | .49     |
| Lard, City, Ex. Winter,<br>gal.....            | 1.00    | 0 | ....    |
| Lard, City, Prime, pres-<br>ent make, gal..... | .72     | 0 | .7      |
| Lard, City, Extra No.<br>1, gal.....           | .55     | 0 | .65     |
| Lard, City, No. 1, gal....                     | .50     | 0 | .55     |
| " West, prime, gal.....                        | .72 1/2 | 0 | .73     |
| Cotton-seed, C r u d e,<br>grades, gal.....    | .36     | 0 | .37     |
| Cotton-seed, Summer<br>Yellow, prime, gal..... | .42     | 0 | .43     |
| Cotton-seed, Summer<br>Yellow, off grades..... | .40     | 0 | .41     |
| Cotton-seed, Winter<br>Yellow, gal.....        | .54     | 0 | .56     |
| Cotton seed, Winter<br>White, gal.....         | .53     | 0 | .57     |
| Sperm, Crude, gal.....                         | .75     | 0 | .80     |
| Sperm, Natural Spring<br>gal.....              | .85     | 0 | .86     |
| Sperm, Bleached Spring<br>gal.....             | ...     | 0 | ....    |
| Sperm, Natural Winter<br>gal.....              | .90     | 0 | .91     |
| Sperm, Bleached Winter<br>gal.....             | .95     | 0 | .96     |
| Whale, Crude, gal.....                         | ...     | 0 | ..      |
| Whale, Natural Winter<br>gal.....              | .50     | 0 | ..      |
| Whale, Bleached Winter<br>gal.....             | .50     | 0 | ..      |
| Whale, Ex. Bl'ch'd, gal.                       | .57     | 0 | ...     |
| Menhaden, Crude,<br>Sound, gal.....            | .40     | 0 | .41     |
| Dark, pressed, gal.....                        | .40     | 0 | .43     |
| Light, pressed, gal.....                       | .48     | 0 | .48     |
| Bleached, Winter, gal....                      | .45     | 0 | ..      |
| Extra Bleached, gal.....                       | .48     | 0 | ..      |
| Tallow, City, prime, gal..                     | .70     | 0 | .70     |
| Western, prime, gal.....                       | .65     | 0 | .75     |
| Cocoanut, Ceylon, lb....                       | .06 1/4 | 0 | ..      |
| Cochin, lb.....                                | ...     | 0 | .07 1/4 |
| Cod, Domestic, gal.....                        | .38     | 0 | .40     |
| Foreign, gal.....                              | .42     | 0 | .45     |
| Red Elaine, gal.....                           | .44     | 0 | .48     |
| Red Saponified, lb.....                        | .05 1/4 | 0 | .05 1/4 |
| Bank, gal.....                                 | .40     | 0 | .41     |
| Straits, gal.....                              | .41     | 0 | .43     |
| Olive oil, for table in tins                   | 1.50    | 0 | 1.55    |
| Olive, Com'n, fble, gal....                    | .58     | 0 | .60     |
| Neatsfoot, prime, gal....                      | .77     | 0 | .80     |
| Palm, prime, Lagos, lb...                      | .05 1/2 | 0 | ..      |

# American Druggist and Pharmaceutical Record.

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## JOHN MICHAEL MAISCH.

WITH saddened heart and lowered voice the loss of John M. Maisch, the greatest of American pharmacognosists, is told, for, as recorded elsewhere, that devoted student has laid aside the lens and the knife, the test tube and the note-book, and passed away from the field of his studies leaving behind him an enduring monument in the record of his investigations.

Rugged in exterior, his large frame and commanding features showed strength in every line; strength both mental and physical, and this strength was freely, even recklessly, spent in his devotion to study of the science in which he has won an undying name.

Prof. Maisch's attainments would have made for him a name as a chemist had not his work in pharmacognosy so monopolized public attention, while as a pharmacist he was entitled to rank among the first in the world.

His memory was phenomenal and his mind so enriched by years of work as author, editor and investigator that it was an almost ideal storehouse of information on every subject pertaining to pharmacy. Nor was this information stored as in a lumber room, but was carefully and systematically collated so that it was always instantaneously available. It was this faculty that made him so interesting a speaker in discussion of scientific subjects, for whatever the matter brought up it seldom happened that he was not enabled without special preparation to throw much light upon its history and its literature.

In his class work he showed a profound knowledge of the subjects under discussion which commanded the fullest measure of the respect of the student.

Of his work as an editor the *American Journal of Pharmacy* is an admirable exponent. He held that, being the organ of so prominent an institution of learning, its devotion to the higher planes of thought and study should be exclusive and the character of the journal was governed accordingly.

Few were more widely known among pharmacists, and his nature was a genial, sunny one, which rapidly turned acquaintances into friends, and among these friends, spread over the whole world, are many old-time pupils who will bear willing testimony to the ready but unostentatious aid which he was ever willing to extend to the struggling student.

The world is better for having harbored such a man, and his life and peaceful death carry with them a lesson to all of the beauty of truth, sobriety and industry, of the undying glory of a life well spent.

## CHEAP TOOTH BRUSHES DANGEROUS.

AN operation for appendicitis upon a patient living in this State revealed the fact that the disorder was due to the presence of tooth brush bristles. "Cheap tooth brushes," remarked the Albany surgeon who had charge of the case, "are responsible for many obscure throat, stomach, and intestinal ailments. The bristles are only glued on, and come off by the half dozen when wet and brought in contact with the teeth."

This is a good argument to use at the counter in discouraging the sale of the cheap and, as the above item shows, dangerous tooth brushes with which the fancy goods trade is flooded. It were better for the user to pay fifteen or twenty cents more for a brush well made than to risk the dangers attending the use of the cheaper makeshift.

APPLICANTS for licenses to practice pharmacy in the Nutmeg State must now pass an examination in practical dispensing, and the examinations are conducted in a miniature drug store. This innovation of the Connecticut Commissioners of Pharmacy is a most commendable one and will go far toward preventing the registration of incompetents.

**An Examination of Beeswax.\***

By E. G. PARRY, B.Sc., and P. A. ESTCOURT, A.I.C.

A large dealer having recently drawn the author's attention to the extensive adulteration of the beeswax at present on the market, they obtained twelve samples from various sources with a view to ascertaining if the adulteration was so general as they were led to believe. Of the twelve samples, some of them from the best London wholesale druggists, four were pure and the remaining eight contained some adulterant. The samples obtained from the best houses were the most heavily adulterated. Indeed, one of them might better have been described as "adulterated paraffin," consisting, as it did, of about 75 per cent. of paraffin wax and 25 per cent. of beeswax.

The usual adulterants of this substance are colophony, paraffin, stearic acid, Carnauba wax, and spermaceti. In addition, bodies such as gypsum, ochre, and sulphur have been found by various observers. The use of these latter substances would constitute a very crude and unscientific method of sophistication. The authors only found paraffin, stearic acid, and rosin in the samples referred to.

The general method of analysis used was that of Hübl—by estimating the amount of potash required for neutralization of the uncombined acids and also

the free acids was greater than the amount of beeswax present required, and they could only assume that this was accounted for by the presence of stearic acid. For example, in sample No. 5 in the table the percentage of myricin found was 25; taking 85 per cent. as an average pure wax, this would represent 30 per cent. of beeswax, which would require about 0.6 per cent. of potash for the neutralization of the free acids. This sample required practically 2.2 per cent.—that is, 1.6 per cent. in excess—which represents 8 per cent. of stearic acid.

The accepted figures for genuine wax are as follows:

| —                      | Specific Gravity at 15.5° C. | Specific Gravity at 100° C. | Melti- g. point. | Percent- age KHO for Acids. | Percent- age KHO for Ethers. |
|------------------------|------------------------------|-----------------------------|------------------|-----------------------------|------------------------------|
| Unbleached wax.....    | .9630                        | .8220                       | 63.5°            | 2.0                         | 7.5                          |
| Bleached (air).....    | .9610                        | .8180                       | 63.5°            | 2.0                         | 7.5                          |
| Bleached (chemically). | .9640                        | .8270                       | 63.5°            | 2.4                         | 7.1                          |

The only reason the authors had for offering this note to the Conference was to point out to what an alarming extent even the best druggists are supplying adulterated wax, and they thought the Pharmacopœia might well give some fuller and more decisive tests than it at present does for this article.

| —  | Description.      | Melting-point. | Specific Gravity at 15.5° C. | Specific Gravity at 99° C. | Percentage of KOH for Acids. | Percentage of KOH for Ethers. | Total Percentage of KOH. | Calculated for Cerotic Acid. | Calculated for Myricin. | Approximate Percentage of Beeswax. | Adulterants.               |
|----|-------------------|----------------|------------------------------|----------------------------|------------------------------|-------------------------------|--------------------------|------------------------------|-------------------------|------------------------------------|----------------------------|
| 1  | Pure unbleached.. | 72°            | .9600                        | ....                       | 8.98                         | 4.0                           | 12.98                    | 65.7                         | 48.8                    | 56.0                               | Rosin.                     |
| 2  | " bleached.....   | 64°            | .9620                        | ....                       | 2.33                         | 7.43                          | 9.76                     | 16.8                         | 89.6                    | 100.0                              | "                          |
| 3  | " " " " " "       | 60°            | .9500                        | ....                       | 2.7                          | 6.00                          | 8.70                     | 19.9                         | 72.1                    | 84.0                               | Paraffin and stearic acid. |
| 4  | " unbleached..    | 64°            | .9329                        | .8190                      | 1.96                         | 7.29                          | 9.25                     | 14.4                         | 68.0                    | 100.0                              | "                          |
| 5  | " " " " " "       | 57°            | .9240                        | .7920                      | 2.18                         | 2.07                          | 4.25                     | 15.9                         | 25.2                    | 90.0                               | Paraffin and stearic acid. |
| 6  | " " " " " "       | 57°            | .9180                        | .7857                      | 1.58                         | 4.7                           | 6.28                     | 11.2                         | 56.7                    | 66.0                               | "                          |
| 7  | " " " " " "       | 64°            | .9620                        | .8185                      | 1.96                         | 7.0                           | 9.07                     | 14.4                         | 84.5                    | 100.0                              | "                          |
| 8  | " bleached.....   | 62.5°          | .9690                        | .8180                      | 2.4                          | 7.1                           | 9.50                     | 17.5                         | 65.7                    | 100.0                              | "                          |
| 9  | " " " " " "       | 59°            | .9660                        | ....                       | 1.25                         | 6.6                           | 7.85                     | 9.2                          | 79.7                    | ...                                | Paraffin.                  |
| 10 | " " " " " "       | 51.5°          | .9398                        | ....                       | 0.61                         | 2.16                          | 2.77                     | 4.5                          | 29.7                    | 85.0                               | "                          |
| 11 | Unbleached.....   | 59°            | .9451                        | ....                       | 2.87                         | 6.22                          | 9.09                     | 17.4                         | 75.0                    | 68.0                               | Paraffin and stearic acid. |
| 12 | " " " " " "       | 61.5°          | .9846                        | ....                       | 1.29                         | 8.06                          | 9.35                     | 9.4                          | 87.0                    | 44.0                               | "                          |

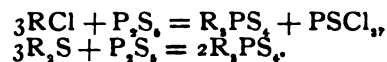
that required for the saponification of the ethers. The melting-point and the specific gravity were taken (the latter by W. Chattaway's method), and special tests were applied where adulteration was probable. Resin was detected by the nitric-acid test in one case only. Five grammes of each sample were boiled with 20 c.c. of nitric acid and after cooling diluted with water and shaken with ammonia; the presence of resin was indicated by an intense red coloration. Paraffin was indicated in many of the samples by the low amount of alkali required for both the neutralization and saponification. Its isolation was effected by decomposing the beeswax by boiling it with concentrated sulphuric acid. The mixture frothed, and much sulphurous acid was evolved; charring also took place. The mass on cooling soon became solid, and was washed with water and exhausted in a Soxhlet's apparatus with ether. This operation was repeated two or three times. The paraffin hydrocarbons were thus separated in a nearly pure state. The melting-point of this was taken, and in nearly all cases found to be about 4° to 6° C. below that of the sample from which it had been extracted by the above operation—for example, see the table, Nos. 5 and 6. The paraffin melted at 54°.

Above is a table embodying the results of the analyses.

Although paraffin and resin were the only adulterants which the authors were able to actually isolate, in those cases where they extracted the hydrocarbon wax the percentage of potash used for neutralization of

**Metallic Sulphophosphates.**

A considerable number of metallic salts of sulphophosphoric acid,  $H_2PS_4$ , have been obtained in a pure state by Dr. Glatzel, of Breslau, and are described in a recent number of the *Zeitschrift für Anorganische Chemie*. They are prepared by heating an anhydrous mixture of the chloride or sulphide of the metal with phosphorus pentasulphide, being produced in accordance with the equations:



The metallic chloride or sulphide requires to be perfectly dry, if possible being fused previous to the experiment. When cold it is finely powdered, intimately mixed with excess of anhydrous pentasulphide of phosphorus and the mixture heated in a small retort, at first slowly and carefully, finally to low redness. If the chloride of the metal is employed, thiophosphoryl chloride distils over and is condensed in a receiver. The excess of phosphorus pentasulphide sublimes into the neck of the retort, leaving the metallic sulphophosphate behind. The latter is purified from any undecomposed metallic chloride or sulphide by washing first with dilute hydrochloric acid, and afterward with water, filtering and drying. In this manner the normal sulphophosphates of manganese, zinc, ferrous iron, nickel, cadmium, lead, thallium, tin, copper, silver, mercury, bismuth, antimony and arsenic have been obtained in a pure state. In addition to these, normal potassium sulphophosphate  $K_3PS_4$  has also been obtained, but it was found impossible to sep-

\*Read before the British Pharmaceutical Conference, Nottingham, 1893.

arate it entirely from phosphorus pentasulphide; efforts to prepare normal sulphophosphates of sodium, ammonium, barium, strontium and calcium have not yet been successful. The normal sulphophosphates of manganese, zinc, ferrous iron, nickel, cadmium and copper were obtained in the form of crystalline powders, the others as fusible solids, which crystallize upon re-solidification. The zinc and cadmium salts are white the manganese salt green; the iron, nickel, lead, tin and bismuth salts vary from dark brown or gray to black; the thallium, copper, silver, antimony and arsenic salts are yellow; and mercury sulphophosphate is red and very sensitive to light. The whole of them, with the exception of the potassium salt, are insoluble in water and organic solvents, but are slowly attacked by dilute acids with evolution of sulphuretted hydrogen. The potassium salt is decomposed by water alone with liberation of the same gas. It would appear, indeed, that the more negative metals, such as bismuth, antimony and arsenic, form sulphophosphates with the greatest facility. The bismuth salt BiPS, remains in the retort after distilling a mixture of bismuth chloride and phosphorus pentasulphide as a dark-colored liquid which solidifies to a gray mass upon cooling, and yields upon pulverization a powder of the color of red phosphorus. Antimony and arsenic form similar crystalline sulphophosphates of a yellow color, which are more volatile, however, and, moreover, may be distilled without decomposition. The arsenic salt solidifies in the receiver in a transparent form resembling amber.

In attempting to prepare a ferric sulphophosphate by the action of phosphorus pentasulphide upon anhydrous ferric chloride, an unexpected artificial synthesis of iron pyrites,  $\text{FeS}_2$ , in crystals identical with those found in nature, was effected. The reaction occurs as represented by the equation:



The crystals of iron pyrites were formed as a beautiful, glistening sublimate just above the heated portion of the retort. They possessed the usual brass-yellow color and brilliant luster, and consisted of pentagonal dodecahedrons and cubes or combinations of these forms, together with faces of the octahedron and of the more complicated forms of the cubic system. Moreover, the same mode of striation was observed as is so characteristic of natural crystals.

Table of Specific Gravity of "Bleach" Solutions.

The following table compiled by G. Lunge and F. Bachofen (*Zeit. für Angewandte Chem.*) shows the specific gravity of solutions of chloride of lime or "bleach" of different strength. The table is based upon the use of a good commercial article free from any great excess of calcium, chloride or chlorate. The determinations were made at 15° C. (59° F.).

| Specific Gravity at 15° (59° F.). | Observed Grammes to 1 liter. | Corrected Grammes to 1 liter. | Specific Gravity at 15° C. (59° F.). | Observed Grammes to 1 liter. | Corrected Grammes to 1 liter. |
|-----------------------------------|------------------------------|-------------------------------|--------------------------------------|------------------------------|-------------------------------|
| 1.1155                            | 71.79                        | 71.79                         | 1.0600                               | 35.81                        | 35.81                         |
| 1.1130                            | 71.50                        | 71.50                         | 1.0550                               | 32.68                        | 32.68                         |
| 1.1105                            | 68.66                        | 68.66                         | 1.0500                               | 29.41                        | 29.60                         |
| 1.1100                            | 68.00                        | 68.00                         | 1.0450                               | 26.62                        | 26.62                         |
| 1.1060                            | 65.33                        | 65.33                         | 1.0400                               | 23.75                        | 23.75                         |
| 1.1050                            | 64.50                        | 64.50                         | 1.0350                               | 20.44                        | 20.44                         |
| 1.1000                            | 61.17                        | 61.50                         | 1.0300                               | 17.36                        | 17.36                         |
| 1.0950                            | 58.17                        | 58.42                         | 1.0250                               | 14.47                        | 14.47                         |
| 1.0900                            | 55.18                        | 55.18                         | 1.0200                               | 11.41                        | 11.41                         |
| 1.0850                            | 52.27                        | 52.27                         | 1.0150                               | 8.48                         | 8.48                          |
| 1.0800                            | 48.96                        | 49.16                         | 1.0100                               | 5.58                         | 5.58                          |
| 1.0750                            | 45.70                        | 45.70                         | 1.0050                               | 2.71                         | 2.71                          |
| 1.0700                            | 42.31                        | 42.31                         | 1.0025                               | 1.10                         | 1.40                          |
| 1.0650                            | 38.71                        | 39.10                         | 1.0000                               | Trace                        | Trace                         |

### The Detection of Blood in the Fæces.

Although the spectroscope is an unerring instrument in the detection of blood, a good apparatus is not always at hand, and the want of an equally delicate chemical test, especially for the presence of blood in the contents of the stomach and intestines, is frequently felt. Deen's test, consisting in a blue coloration, when blood and turpentine are added to a solution of guaiacum resin, is not applicable, because the normal stools as a rule give a positive reaction. Weber finds, however, that the disturbing constituents are excluded if the fæces or urine be first treated with a third of their volume of glacial acetic acid, and the acid solution shaken out with ether. Ten drops guaiacum tincture and twenty drops of turpentine added to the ethereal solution give a blue-violet coloration if blood is present, while the mixture remains reddish-brown (sometimes with a green tinge) in its absence. The reaction depends upon the ferruginous constituent of the blood, hæmatin.—Berlin letter in the *Bulletin of Pharmacy*.

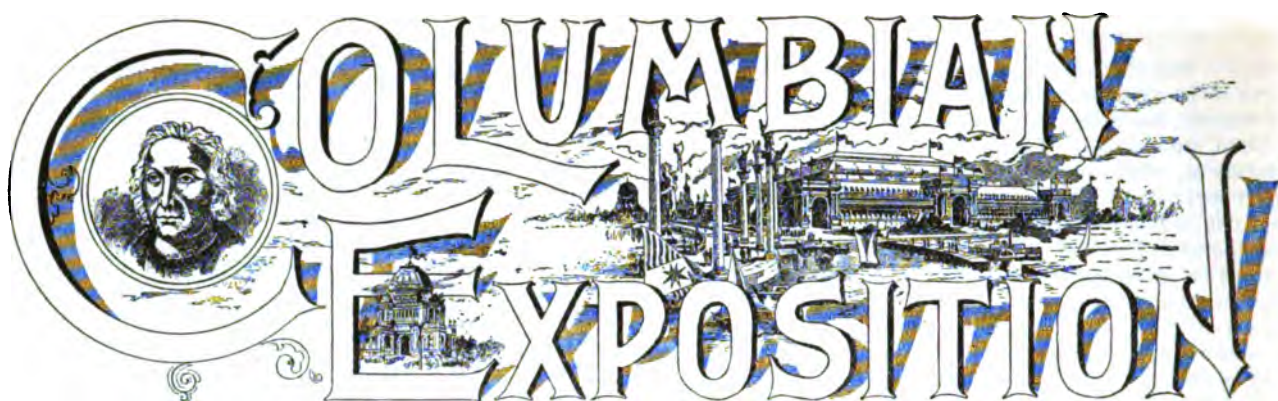
### Methylene Blue for Determination and Estimation of Sugar in Urine.

Place 5 or 10 cubic centimeters of the urine under investigation in a cylinder, add ten times as much water and mix well. Dissolve 1 gramme of pure methylene blue in 1 liter of distilled water, add 1 cubic centimeter of this and 1 cubic centimeter of normal potassa solution to 1 cubic centimeter of the diluted urine. Dilute this blue mixture with about 2 cubic centimeters of water and heat over the open flame until it has boiled about a minute. If the color is entirely discharged the urine contains at least 0.5 per cent. sugar. If the color holds the urine cannot be considered as diabetic. On agitating the decolorized liquid the color will be restored by re-oxidation of the methylene blue. For quantitative use the same solutions are used the urine being diluted as required and the results being figured out thus:  $P = \frac{0.05 \times v}{c}$  in

which P equals the percentage of sugar present, 0.05 represents the quantity of sugar required to decolorize the amount of methylene blue used in this formula (which is invariable) v equals the dilution of urine used, and c the volume of the diluted urine. For instance, if for total decoloration there is required 1.6 cubic centimeters of urine diluted to 1 in 200, the formula would read:  $P = \frac{0.05 \times 200}{1.6}$ . Lactose and fructose

also reduce this agent, but these are very seldom present, though lactose is occasionally present in the urine of nursing women. The other substances generally present do not affect the test. The reaction consists in the reduction of the methylene blue, which is a tetramethyl derivative of thionin hydrochlorate, to methylene white or tetramethyl-para-diamido-thiodiphenylamine.—*Pharm. Post.*

**To Destroy Wasps.** B. A. W., Miss.—The following process has been recommended by correspondents of a Berlin journal. Place some strongly aromatic fruit juice, such as strawberry or raspberry, in old bottles with narrow necks, diluting with water so as to fill the bottles one-fourth to one-half full. Stand or hang these bottles in the vicinity frequented by the wasps. Hornets and wasps both will crowd into these bottles as long as there is room for them and will be unable to escape. Poison is unnecessary. Bees will not go in unless honey is put in the bottles or something that smells like flowers.



MEETING OF THE SEVENTH

## INTERNATIONAL PHARMACEUTICAL CONGRESS.

(Concluded from page 151.)

But in spite of this, actions had been brought against sellers of vinegar made of acetic acid and burned sugar, and convictions obtained, because the vinegar was not up to pharmacopœial quality. These convictions have been set aside unless the article asked for was malt vinegar. In recommending any laws, care should be taken that the honest trader was not unduly harassed.

Another question which had arisen in Great Britain was concerning the pharmacopœial standard for the sale of all medicines. On this subject Mr. Martindale said: "As an instance I will mention aromatic spirits of ammonia, which is largely used in England as a household remedy. Many pharmacists have old prescriptions, sometimes over a century old, presented, requiring the spirit to be made generally by distillation and rather than accede to the British Pharmacopœia, they have frequently been accustomed to adopt the old formula which their customers require. An enforcement of the law in such cases would work an injustice. For this reason I consider that little good could be effected by the appointment of a committee by the Congress, as each country has its own peculiar difficulties to be overcome, and work in this direction could only be effectively done by the appointment of national committees."

Dr. Ramlot, of Brussels, said that he differed with Mr. Martindale, that the subject of adulteration was an international and not a national question. He stated that the last pharmaceutical congress had made certain recommendations regarding the prevention of adulteration and upon the basis of these recommendations the Belgian government had passed an excellent anti-adulteration law. The Congress was international in its scope and any decision it might arrive at regarding adulteration would be given due consideration by foreign governments when the matter was submitted to them.

Dr. James read from the proceedings of the Brussels congress the draft anti-adulteration law to which Dr. Ramlot referred. This had been framed by a committee of the Brussels congress. He also stated that committee reported before the adjournment of the Congress, and that their recommendations had already been adopted by the Belgian government and were under consideration by the French authorities. That committee had finished its work and had recommended that it be continued by the present Congress.

Mr. Rogers said he would like to know, while adulteration was being discussed, what had become of the Paddock Food Bill?

Professor Hallberg replied that it was well known that that bill was killed by the patent medicine men with the assistance of the wholesale druggists, while the retail druggists helped them to do it. (Applause.)

Professor Whelpley offered as a substitute the following, which was accepted by Messrs. Fennel and Sayre, the mover and amender of subsequent motions:

That a standing committee on adulterations be appointed, said committee to report at the next International Pharmaceutical Congress, the duties of said committee being that of pointing out ways and means of securing proper laws to regulate the adulteration of foods and drugs in the several countries.

A vote upon this motion resulted in its unanimous adoption.

Professor Whelpley moved that the committee consist of one representative from each country represented at the Sixth and Seventh International Congresses. Carried.

On motion of Professor Hallberg the chair was instructed to select the members of the committee.

President Remington here called for the report of the committee on compulsory education, appointed at the third session.

On behalf of this committee, Dr. Hinrichs (who had been substituted for Professor Caspari, who had to leave) reported as follows:

"The committee on pharmaceutical education reports the following recommendations to the Congress:

1. No student should be admitted as apprentice by a pharmacist unless such student has passed a satisfactory preliminary examination in such subjects of general education as may be best suited to the requirements of the several countries not yet having enforced much requirement of compulsory education and that such student's time of apprenticeship shall date from the time of that examination.

2. The total duration of apprenticeship should be not less than four years, including the time of attending a college or school of pharmacy.

3. Inasmuch as pharmacists have observed the inadequacy of such a method of determining the qualification for the practice of our art as consists simply of a stated examination, and believing that through no single examination, no matter how thorough nor how capable the examiner, can the status, the knowledge, practical usefulness and value of applicants for the important privilege of dispensing drugs and in compounding medicines be fairly arrived at; and further that pharmacy no less than other scientific pursuits requires systematic, persistent and continuous training,

Therefore be it resolved that this Congress approves of the recognition of the principle of a compulsory curriculum, that no person should be entitled to become registered as titled or qualified pharmacist without having prosecuted a systematic course of instruction in the various branches of pharmaceutical science.

Resolved, further, that every delegate be requested to use his influence with his society for the promotion of this principle of such paramount and fundamental importance to pharmacy."

On motion of Mr. Ebert, the committee's report was received, and he further moved that its provisions be considered *seriatim*.

Mr. Martindale moved the adoption of the first section.

Mr. Ebert said that before this was done, he wished to say that the provisions embodied therein should be left to the colleges of pharmacy, and those institutions should make them the standard of entrance to their courses.

President Remington replied that the resolution simply expressed the opinion of the Congress, that an apprentice should have a preliminary examination before entering the pharmacy before whatever authorities might be provided in the various countries.

This point being explained, a vote was taken on the first section, and it was unanimously adopted.

The second section of the resolution was next considered.

Professor Prescott said that he should feel more in favor of it if it clearly defined what constituted apprenticeship. "If an enlightened apprenticeship is ever made possible in this country," he said, "then God grant that apprenticeship may have a definition, so that it may amount to something when it begins and something when it ends." (Applause.) The second section was too vague on that point, although perhaps as broad as possible under the circumstances. With that reservation, however he would vote in favor of Section 2.

A vote was then called for on this section, and it was adopted.

Section 3 was also favorably received, and lastly, on motion of Professor Fennel, the resolutions as reported by the committee, were adopted as a whole.

Professor Oldberg said that since this subject was disposed of, he would move that a special committee of five be appointed, to prepare a resolution expressing the sense of the Congress as to what educated pharmacists can and should do in reference to public sanitation, and he would like to include in his motion that Professor Prescott be made chairman of this committee. The motion was carried. The president appointed Messrs. Prescott, Oldberg, Martindale, Ramlot and Bastin upon this committee, and later in the session the following report was presented:

"Your committee on public sanitation beg leave to report the following: *Resolved*, That in the judgment of this Congress, the educated pharmacist is the natural and proper expert on measures for public tests, not only in prevention of adulterations but in the inspection of water supplies, of sewage, etc. The pharmacist is, by virtue of his profession, the common chemist of the common people." (Applause.)

On motion of Mr. Rogers, the committee's report was unanimously adopted.

Secretary Oldberg presented the following communication addressed to all the

scientific congresses now in session in the Art Palace:

"You are respectfully informed that a reception will be tendered to the officers, speakers and delegates of the various congresses at the Art Institute to-morrow, Thursday evening, at 9 P.M., to which all are invited."

He also presented a paper on the subject of pharmaceutical education and the practice of pharmacy in Italy, addressed to the chairman of the Section on Pharmaceutical Education of the American Pharmaceutical Association, and by that body referred to the Pharmaceutical Congress. The paper was entitled "The Condition of Pharmacy in Italy and in Lombardy," and was contributed by the Secretary of the Chemical and Pharmaceutical Association of Lombardy, Milan, Italy.

On motion, the paper was received and referred to the committee on publication.

President Remington said that as each congress had heretofore expressed its opinion on the patent medicine and specially question, it would be well for the present body to follow the example of its predecessors. The subject would now be considered open for discussion, based on Article 4, Section 1 of the programme, which was as follows:

"The influence exerted upon the practice of pharmacy by the introduction of chemicals and other medicinal substances controlled or limited by patents, copyrights, trademarks, or other legal restrictions, but which are commonly ordered by physicians in their prescriptions. Should such limitations as foster monopoly in the manufacture and sale of such products be removed in the interest of public good?"

Professor Hallberg opened the discussion. He said that the Congress should make a distinction between proprietary medicines, trademarks, copyrights and patented processes. Even antipyrine is made by five different patented processes on the continent of Europe. The pharmacopoeia of 1880 had included Kolbe's patented process of salicylic acid, which expired about three years ago. In the face of this fact, however, the pharmacopoeial convention of 1890 resolved that articles made by patented processes were not eligible for the pharmacopoeia. He could thus see where a grave injustice could be done. Where a chemist has been working for many years in perfecting a process, he had a right to enjoy remuneration therefor by patent protection. Kolbe had this right. There may be other valuable chemicals presented in the same way and it was an injustice to inventors to reject them simply because they have found it necessary in this commercial era to protect themselves by patenting certain preparations in the production of which they have expended time, study and labor. With reference to the trademark or copyright that is something that any manufacturer has a right to use. Every man who makes an article has a right to have his mark on it, so that his particular manufacture can be distinguished from other manufactures. As to the proprietary medicines—that was a question upon which all were agreed. They do not add to the professional standing of the pharmacist but detract from it, and should be abolished.

President Remington stated that he had explained in his address to the American Pharmaceutical Association that certain preparations which were protected by patent or copyright were not considered suitable for admission to the pharmacopoeia for the reason that the manufacturer could at any time, alter the product or change his process, and thus make the tests given in the pharmacopoeia of little or no value,

the manufacturer, of course, being a law unto himself. The non-introduction into the pharmacopoeia does not prevent the use of the preparations, but unless they are free and in the open market, they should not be introduced into the pharmacopoeia. It was desirable that some means of checking the use of these preparations should be adopted.

This practically closed the discussion and no further opinions were expressed, by the delegates, the majority of whom had probably heard enough of cut rates and patent medicines while attending the sessions of the A. P. A.

Mr. Robe, who represents an Indiana short-course college and about whose admission as a delegate some discussion arose in the committee on credentials at the first session, was the next speaker. He asked President Remington whether the subject of a college curriculum in pharmacy could not be discussed, as he would like to get the views of the Congress.

Professor Hallberg questioned Mr. Robe's right to address the Congress, and raised the question of his credentials.

President Remington said that the proper committee had already attended to that.

An altercation thereupon arose between Professor Hallberg and Mr. Robe, in which the latter attempted to give a history of the foundation and progress of his institution. "Now I have the floor," he said excitedly, "and I have the right to speak. This same dispute occurred last week. It has occurred once before. The question was raised in this Congress as to whether the Indiana College of Pharmacy should be recognized here. I want to explain to this Congress why it has been raised so many times."

President Remington called Mr. Robe sharply to order and reminded him that the subject of local colleges of pharmacy was not before the Congress for discussion.

A motion was at once made to expunge all discussions on the subject from the minutes and unanimously carried.

Mr. Robe, before the session closed, apologized for having interrupted the proceedings. His apology was accepted, and harmony once more reigned.

Mr. A'pers now moved that a vote of thanks be tendered by the International Pharmaceutical Congress to the American Pharmaceutical Association, the World's Congress Auxiliary, the committee on arrangements and its officers, the Illinois State Pharmaceutical Association and the druggists of Chicago for undergoing the hard and tedious work of arranging for the Congress and for their hospitality in receiving and entertaining the delegates, and the untiring efforts which made this Congress a success. Resolved, that we express our appreciation and thanks to those associations and gentlemen by a rising vote.

The resolutions were seconded and unanimously adopted in the way indicated by the mover of the resolution.

Professor Whelpley moved that copies of the resolutions adopted of the Congress on the subject of pharmaceutical education be sent by the secretary to the national associations in the various countries represented at the sixth and seventh international congresses with a view to bringing the subject of pharmaceutical education to their attention. Such associations—the A. P. A. in this country for instance—can then pass resolutions upon the subject and take such other action as may be thought desirable with a view to carrying out the recommendations adopted. The motion was seconded and carried.

President Remington announced that the next business before the Congress was

upon the provision for the appointment of an executive committee, and for the publication of the proceedings. The last Congress provided that an executive committee should be appointed, consisting of the president, the secretary and three others, to arrange for the next Congress.

Professor Fennel therefore moved that the Congress appoint an executive committee, to consist of the president, the secretary and three others, to provide for the next international pharmaceutical congress. The motion was carried.

President Remington appointed Dr. Ramlot, of Brussels, to act as a third member of this committee.

The president then announced that no further business was before the Congress, and that a motion to adjourn would be in order.

Dr. Hinrichs said that before this motion was put, he desired to offer a vote of thanks to the president of the Congress for the excellent and courteous manner in which he had presided at its deliberations.

After enthusiastically applauding the resolution, the Congress voted for it unanimously.

Dr. Ramlot followed with a short address. He said that he desired to offer not only his own thanks but the thanks of the city of Brussels, the whole of Belgium, and especially of the Royal Belgium Pharmaceutical Society, for the courteous manner in which he had been received and for the honor conferred upon him in placing him on important committees. "I cannot sufficiently express my admiration of the celerity with which business has been transacted here," said the doctor, "for the way in which unpleasant discussions have been suppressed and the excellent manner in which our president has managed to keep the meeting in order. (Applause) Three years from now the next international congress will probably meet, and I certainly hope to see one more largely attended, but I cannot expect to see one that will be more businesslike. (Applause.)"

Mr. Martindale heartily seconded the sentiments expressed by Dr. Ramlot. "Speaking in behalf of the pharmacists of Great Britain," he said, "I most heartily thank you for all the kindnesses you have extended to my colleagues and myself, who have come from Great Britain representing the Pharmaceutical Society. We have fully appreciated the kindness, the interest in our welfare shown by your president, local committee and the many local representatives whom we have met."

Morten Neygaard of Sweden, spoke in his native tongue, which aroused the enthusiasm of the Swedish delegates. He said that he had taken great interest in examining pharmaceutical education in the United States and comparing it with the older institutions of the country from which he came. In many respects the older countries were more advanced, probably owing to government support, but he was much gratified to learn by actual observation that in America pharmacy is continually striding forward, and that a strong effort is being made to elevate and dignify the pharmaceutical profession. (Applause.) He had been exceedingly glad to become acquainted with eminent American pharmacists of whom he had so often heard, but had never been able to meet. One behalf of his countrymen, he extended hearty congratulations to the members of the Congress on the success of their deliberations, and closed with sincere thanks to those who had endeavored to make his visit to Chicago both pleasant and profitable. (Applause.)

President Remington: In closing the

Seventh International Pharmaceutical Congress, I desire to say a few words :

In making arrangements for this Congress, the work was entirely new to us. The few precedents established at other congresses as shown by the proceedings were of little assistance. Therefore, when the members from abroad saw the formidable list of papers and topics for discussion presented by the programme, they were somewhat appalled. One of our English friends said, "Why, do you ever expect to get through the consideration of all these questions? Previous Congresses have been satisfied with three." One of our other English friends answered the question for me, for I confess I was a little non-plussed. He immediately said, "Ah, Mr. Carteghe, this is a great country." (Applause.)

I am sure that our Chicago friends have expressed this same feeling toward us, and while this expression may not be new to many of you, still it is certainly new in this connection; and really since I came to Chicago, I have become a convert to that idea—it is a great country. (Applause.)

We are soon to part—many of us come from long distances—but I believe that we shall all go away from this first pharmaceutical congress ever held in America filled with new inspiration, with greater love for pharmacy, and more power to continue forward and onward in the right and proper course as we know it. (Applause.)

Mr. Muir expressed the thanks of the Canadian delegates for their kind reception and the bounteous hospitality they had received.

This terminated the proceedings, and on motion the Seventh International Pharmaceutical Congress finally adjourned.

#### Late Echoes.

Dr. A. H. Brundage, president of the Brooklyn College of Pharmacy, is a new-comer at the A. P. A. meetings. His wide opened eyes took in what was going on, however, whether of scientific or of business import.

Henry Kraemer, of New York, the Reporter on the Progress of Pharmacy, is a slender young man, brown of hair, of eyes and of clothes, quiet, earnest, enthusiastic for work and particularly enthusiastic for higher pharmaceutical education.

Dr. Wiley Rogers, the newly elected third vice-president, is a large man with a sug-

gestion of President Cleveland in both face and figure, a resemblance happily hit off by President Remington, who at the installation of officers introduced him as "The President of the United States—I beg your pardon, the third vice-president."

W. S. Thompson, ex-president of the association and chairman of the delegation to the section on pharmacology of the Pan-American Medical Congress at Washington, is a tall, handsome, rather slender man, dark from sunburn, gray, stalwart, sedate, earnest. His very appearance alone commands attention, which his rare utterances deserve.

## EXHIBITS AT THE WORLD'S FAIR.

### Forestry Building.

(Armstrong Bros. & Co.'s Exhibit, continued).

In Armstrong & Co.'s pavilion are also displayed strips of cork, cut and granulated cork, various implements made of cork—washers, cork-soles, etc.—and also a giant cork about eighteen inches high and ten inches in diameter. The most interesting portion of the exhibit consists of pictures in relief cut from cork. The capitol at Washington, and St. Peter's Church, at Rome, are thus represented, and these being the largest are valued at several hundred dollars. There are also a number of smaller pictures made in the same manner. R. W. McCready & Co., of Chicago, has a similar but smaller exhibit.

### Government

#### Building.

This structure is located north of the Manufactures Building and south of the Fisheries Building. The exhibits are very interesting, and the building is freely patronized by visitors, and there are some exhibits of special interest to the pharmaceutical profession, these being located in the northeast corner of the building. Here is located a display embracing between one and two thousand dried herbs of this country, mounted on paper in the usual way, and the "mounts" are inclosed in frames. The plants represented in this manner are such as yield medicinal substances, and the latter are shown beside the mounts in wide-mouth bottles. The sheets on which the herbs are mounted are inscribed with



CORK EXHIBIT OF ARMSTRONG BROS. & CO.

Dr. Simon, of the Maryland College of Pharmacy, a man who not only never rests but never even tires, has a rare quality in men of profound scientific attainments, and that is a great catholicity in his capacity for enjoyment.

He is spare, above the average height, wears spectacles, a round beard rather longish, streaked with gray. His consideration for the feelings and opinions of his friends is as remarkable as is the profundity of his scientific attainment and his cheerfulness is proof against the most trying vicissitudes of the tourist.

the Latin and English names of the drug, its habitat and the medicinal properties. This is probably the most interesting and instructive exhibit yet mentioned, and the Government certainly deserves credit for this as well as the other displays in the building.

Just north of this drug exhibit is a chemical laboratory with all necessary apparatus. These two exhibits belong to the Department of Agriculture. There are several chemists in this section constantly at work, which usually has reference to plants and plant products. Here are also a number

of the pamphlets issued from time to time by the division of chemistry of the Department of Agriculture, such as those on adulteration of foods, drinks, etc., as well as the one recently issued on "Nostroms to Increase the Yield of Butter" in which that interesting compound, "black pepsin," receives due attention.

#### Mines and Mining Building.

This building is located between the Electricity and the Transportation Buildings and all three are situated across the lagoon from the Manufactures Building.

As in the other buildings, the pavilions of foreign countries are arranged in one portion of the building and those from the various States in another part of the building. In this case, the main aisle extending north and south is the dividing line.

One of the first pavilions to be seen on entering the southern portal of the building is that of Chili, whose exhibit consists mainly of sodium nitrate. Here are shown masses of caliche, the crude substance from which the salt is produced and of which it contains 30 to 60 per cent. Nitrate of sodium, of various degrees of purity, is also displayed. A 95 per cent. article, which is brown in tint, is shipped to Europe for fertilizing purposes. A variety of the salt, 96 to 97 per cent. pure, and which is almost white, is the kind which usually comes to this country, where it is employed largely for blasting purposes. A purer variety is 98 per cent. pure and is quite white, and lastly there is a crystalline specimen which presumably is almost absolutely pure. Iodine is now prepared mostly from the residuum of Chili sodium nitrate and hence in the same pavilion is shown a handsome specimen of iodine, also various compounds containing iodine such as the common metallic iodides and iodates, sozoiodol, the artificial dye stuffs containing iodine, etc. In the pavilion are also shown various copper and silver ores.

The only exhibit from Bolivia is located in this building and hence the Bolivian pavilion contains several varieties of cinchona bark, also cochineal, a variety of aniseed which is more spherical than the kind which appears in our market, coca leaves, vanilla—a very poor specimen—hyposulphite of sodium, linseed and other seeds, barks, minerals and chemicals. The most interesting portion of the exhibit is a couple of huge balls of India rubber, each of which weigh, perhaps, two hundred pounds.

Greece is represented by a pyramid of masses of crude sulphur, also the refined article in the solid form in boxes, each mass weighing several hundred pounds, and the same in the powdered form in glass jars. Emery is also shown in the mass form and reduced to various degrees of fineness.

Spain is represented by iron and lead ores, also cinnabar from which mercury is

derived, and with it a fluid ounce bottle filled with mercury itself.

Russia is represented by a piece of ozokerite, which is dark brown in color, asphaltum, petroleum and all its products, benzine, paraffin, lubricating oils, and a large variety of mineral oils.

Judging by the Japan pavilion, that enterprising little country is rich in mineral resources. In the pavilion are displayed various iron ores such as magnetite and hematite, sulphur in various degrees of purity, copper and silver ores, antimony ores, principally stibnite, metallic antimony in masses, immense black lead crucibles, a crystalline salt from a mineral water vaunted for all the ills of man, Hirano mineral water, etc.

(To be continued.)



JOHN M. MAISCH, PHAR.D.

### Obituary.

#### John M. Maisch, Phar. D.

John Michael Maisch, professor of materia medica and botany in the Philadelphia College of Pharmacy, and permanent secretary of the American Pharmaceutical Association, who died at his home in Philadelphia on the evening of the 10th inst. of cancer of the throat was born at Hanau, Germany, January 30, 1831. He began the study of the natural sciences at an early age and continued the same until he came to the United States in 1849, when he entered the drug business in Baltimore; he subsequently served as clerk in Washington, D. C., from 1851 to

1853, and in Philadelphia with Robt. Shoemaker from 1853 to 1859. In 1854 he made the acquaintance of Prof. Wm. Procter through his literary contributions, and soon after was engaged in the revision of the second edition of Parrish's "Introduction to Practical Pharmacy." In 1859 he became a member of the Philadelphia College of Pharmacy, and in 1861 accepted the professorship of materia medica and pharmacy at the New York College of Pharmacy, at the same time taking a position in Dr. Squibb's laboratory in Brooklyn from whence he removed to Philadelphia in 1863 to establish and equip the United States Army Laboratory, which he accomplished with the greatest success. In this position he is said to have effected a saving to the government of nearly four

million dollars. Upon the discontinuance of the United States Army Laboratory in 1863 he set up in business for himself, opening a drug store in Ridge avenue, Philadelphia, which he conducted successfully until 1871, when he disposed of it in order to be able to devote his whole time and work to the largely increasing duties of his professorship, to editorial labors and to scientific and literary pursuits.

In 1856 Maisch became a member of the American Pharmaceutical Association. His Report on the Progress of Pharmacy for the years 1860 to 1862 was so well received that the essential features of the system introduced by him have been retained ever since. His labors since 1865 as permanent secretary to the American Pharmaceutical Association are very well known, and show his self-sacrificing nature in the interests of science. For over 36 years he was one of the most indefatigable workers of the association.

Aside from many special contributions to science, Prof. J. M. Maisch, with Prof. A. Stillé, issued the "National Dispensatory" in 1879, which has gone through several editions, and was followed in 1882 by his "Organic Materia Medica," of which five editions have already appeared. Professor Maisch assumed the editorial work of the *American Journal of Pharmacy* in 1871 and was engaged in the duties of his

office up to within a month or two of his death. He also edited the last edition of "Griffiths Medical Formulary." He was an honorary member of several foreign pharmaceutical and other scientific associations and had recently been awarded the Hanbury Medal of the Pharmaceutical Society of Great Britain.

Frank W. Wadlin, chemist, of the Baker Extract Company, of Portland, Me., is dead.

Dr. F. C. Miller, a well known druggist and one of the most respected citizens of Wilmington, N. C., died at his residence, corner Fourth and Nunn streets, after a lingering illness.

John B. Stone, whose illness attracted widespread interest, died at his home in Gloversville, N. Y., age 51 years.

John Harney, one of the members of Weeks & Potter Drug Co., Boston, where he had charge of their fancy goods department for the last twenty years, is dead.

Powhatan E. Dupuy, for many years of his life a leading druggist on Broad street, Richmond, Va., died lately at his residence in that city after a long illness. Mr. Dupuy was one of the best known of Broad street merchants. His health began to decline about three years ago.

Frederick H. May, eldest son of Frank D. and Emma May, of Hartford, Conn., died at his home there after an illness extending over a period of nearly two years. He was formerly in the employ of McKesson & Robbins, wholesale druggists, in New York, but ill health compelled him to give up his position there. He was a bright and promising young man, nearly 23 years old. His disease was heart trouble.

### Journalistic Amenities.

The *Shipping and Commercial List*, a commercial paper of this city devoted to market reports, financial and shipping news, etc., publishes in each issue a very readable and accurate report of the wholesale drug market, including the departments of dyes and oils, and the *Oil, Paint and Drug Reporter*, a weekly paper devoted solely to the departments indicated by its name, has been discovered to have been paying its contemporary the highest compliment one paper can pay another. The *Shipping List* not to be outdone, treats the *Reporter* to a half-page advertisement free, and it was brought about in this wise: In pursuing its well known policy of economy in its editorial expenditures, the latter journal has found it less expensive to copy portions of the market reports of the *Shipping List* than to prepare original reports. The *Shipping List* very good-naturedly gives its consent to this procedure, but naturally enough asks that the *Reporter* in making the quotations give it the usual credit for the matter used. The "deadly parallel" is used to show the extent to which the *Reporter* is indebted to the *Shipping List*. An interesting feature of the case is that the borrowed "news" appeared in the *Reporter* five days after its appearance in the *Shipping List*, which is rather severe on such of the trade, if there be any, as depend upon the former journal for information as to the state of the markets.

This is, however, not the first time that the *Oil, Paint and Drug Reporter* has been proven guilty of pursuing a short sighted economy in the matter of its market reports. On one occasion some years ago a contemporary printed a most interesting set of excerpts from the *Reporter* which showed that in one of the market reports, entire paragraphs had been repeated at intervals of two or three weeks.

So long, however, as the *Reporter* does not attack the Standard Oil Company and continues to make money a mere matter of leading any one astray who may chance to read it, is a matter which will probably cause no concern to its management.

## PHARMACY BOARDS.

**TENNESSEE BOARD.**—A regular meeting of the board for examination and registration will be held at Chattanooga on September 20. Applicants for examination should correspond with the secretary of the board, J. O. Burge, Nashville.

### Georgia Board.

The Georgia Board of Pharmacy met in Rome, August 9. The full board was present, Jno. W. Goodwyn, S. C. Durlan, Harry Sharp, George F. Payne and H. R. Slack. They examined a class of 19, of which 4 failed. The following made pharmacist's licenses: J. P. Walker, Montezuma; Paul D. Reese, C. T. Jervis, Rome. Apothecary's license was given W. J. Butts, Brunswick; Dr. B. C. Powell, Villa Rica; J. H. Ward, Griffin; Chas. A. Harris, Dawson; Chas. F. Taylor, Rome. The druggists were: C. D. Curtis, S. D. Little, Griffin; G. J. Kelly, Flovilla; H. A. Reaves, Brunswick; Robt. Tyler (Col.), Mason; Dr. H. C. Tutt, Augusta; Walker Wright, Barnesville and J. F. Wills) Columbus.

The Board decided to raise the required percentage after the next meeting from 60 to 65 and to restrict interstate license to those who average 70 per cent. and over, and do not fall below 60 per cent. in any one branch.

The complimentary license for best examination in the class was awarded to Joel P. Walker, and the Sprague Medal for best examination in the year was awarded to Jno. W. Goodwyn, Jr., of Macon. The Board adjourned to meet in Atlanta, subject to the call of the chairman.

Gov. Northen has reappointed S. C. Durlan, of Augusta, to succeed himself on the board. This appointment gives general satisfaction.

Drs. Payne and Slack represented this board in the International Congress.

### Illinois Board of Pharmacy.

At the practical examination of the State Board of Pharmacy, Illinois, held in Chicago, August 14, 15, 1893, the following passed a satisfactory examination as licentiates in pharmacy, and were registered as registered pharmacists by examination: C. H. Avery, H. B. Hunter, F. W. Mechener, L. Merriman, I. Platt, of Chicago, and L. A. Schmidt, Rock Island.

The following passed a satisfactory examination as assistant pharmacists, and were registered as assistant pharmacists by examination: O. C. Ebinger, C. F. Fischer, Miss Nan G. Gladish, H. H. Hubbard, P. C. Huebner, C. O. Ingersoll, J. R. Moun-tain, P. K. Moore, I. L. Quales, W. M. Robb, A. O. Solberg, L. F. Strehlike, Mrs. Addie M. Tipton, A. W. Williams, of Chicago; H. H. Bartholomew, Quincy; J. A. Lyon, Danville; A. G. Volz, Arlington Heights, and F. B. Wynkoop, Wauconda.

The next meeting of the board for examination will be held September 12, 1893, at No. 173 39th street, Chicago.

### Ohio Board.

The Ohio Board of Pharmacy met on August 15, at Toledo, to examine applicants for State certificates. The board is composed of John Weyer, president, of Cincinnati; Charles Krone, Hamilton; F. T. Brown, of Toledo, and Messrs. W. R.

Ogier, secretary, and Chas. E. Ink, of Columbus, Franklin County, O. There were 85 applicants for certificates, 25 for assistant pharmacists and 60 for pharmacists.

The following were applicants for a certificate as assistant pharmacists: Eugene Hardesty, Payne, O.; Cyrus North, Toledo; John I. Kenninger, Toledo; Will McDonagh, Toledo; L. A. Challen, Toledo; Edward C. Frank, Toledo; G. H. Wetzen, Gibsonburg; Ross R. Mortland, Bowerstown; Victor S. Law, Toledo; Mark Rosingorden, Toledo; B. F. Kramer, Norwalk; Joseph F. Gates, Jr., Toledo; John W. Tuttle, Norwalk; Wm. C. Harder, Sandusky; Jos. A. Demming, Cleveland; Lewis H. Ohly, Sandusky; F. S. Browne, Toledo; Frank J. Berning, Luckey; C. D. Stukey, Columbus; Edward S. Stukey, Columbus; R. N. Shaw, Savannah; Wm. Nires, Cleveland.

The applications for a pharmacist certificate were: Otto A. Zeidler, Cleveland; Ralph Schuster, Dayton; Chas. A. Fisher, Hamilton; A. F. Egger, Toledo; Oscar I. Myers, Toledo; Ellis B. Newton, Bowling Green; Denton E. Hull, Toledo; E. J. Machen, Toledo; Chas. H. Steincamp, Toledo; John H. Marquardt, Toledo; Joseph Hausman, Cincinnati; John A. Siegrist, Wills Creek; Edward Wetchen, Toledo; Lucius Judson, Clayton, Mich.; R. S. Applegate, Oxford; James I. Taylor, Celina; R. E. Erick, Harrisville, Pa.; W. F. Harper, St. Marys; F. A. Kautz, Jr., Cincinnati; W. M. Curtis, Charlotte-town, Canada; Prince Edward Island; Herman Kattman, Cincinnati; Chas. L. McIntire, St. Marys; C. H. F. Lemke, Toledo; Henry A. Grothaus, Winchester; Daniel D. Jones, Columbus; Herbert J. Roney, Columbus; Wm. T. Dawe, Cincinnati; Frank J. Broff, Van Wert; Mayme Liggett, Marysville; Harry B. Lewis, Defiance; Leclair W. St. Clair, Woodsfield; Harry Applegate, Manchester; Josie Lechnwansky, Oak Harbor; Mamie Hebenthal, Paulding; Edgar J. Craft, Mt. Vernon; M. D. Danford, East Richland; S. C. Daniel, Loydsville; Jos. D. Crossland, St. Clairsville; Samuel R. Light, Weston; August Kramer, Stryker.

## Interstate Retail Druggists' League.

The following circular has been sent out to the branches of the Retail Druggists' Association of the United States:

The Interstate League expects, after September 10, which is the beginning of its new year, to inaugurate a new canvass of the different localities not yet organized, and to do this it will require a vast amount of circulars and printed matter; also a healthy fund for other necessary expenses. I would hereby like to notify the different branches of the League that the annual assessment for each association becomes due on September 1 for the year '93-'94, and the secretary of each branch is requested to remit to our financial secretary, C. T. P. Fennell, Eighth and Vine streets, Cincinnati, O. The secretary of the League, through illness, has not been able to give the work the proper attention of late, and at the same time, realizing the extreme dullness of the trade throughout the country, the all-absorbing World's Fair, and the coming meeting of the A. P. A. and the N. W. D. A., deemed it advisable to hold off from very active canvassing until these events take place; for judging from the present outlook for the meetings of the N. W. D. A. and the Manufacturers' and Proprietors' Association, it appears that they will take up a very important matter, which concerns the retailer as well as the jobber, and they may come to some mutual agreement whereby the League may alter somewhat its mode of procedure and thus hasten its success. Therefore, for the present, judging what we may expect from the action of the A. P. A. and the N. W. D. A., the secretary deems it advisable to simply advise organization among retailers.

There is no use in waiting any longer to see whether or not we may be able to accomplish anything by organization; our work of the past has demonstrated that we can accomplish a great deal, and the druggists are simply retarding their own success by delaying the matter of local organization. The work of the League is bearing fruit and the manufacturers and jobbers are realizing the importance of controlling the sale of their goods in such a way as not to interfere with the profits of the retailer. Therefore what the retailers must do is to organize and give their assurance of assistance in this work. A plan will no doubt eventually present itself whereby proprietary goods can be handled profitably to the satisfaction of the retailer and jobber. Therefore the main importance to the retailer is organization, and let that be effected at once. Call a meeting of the druggists in your locality, organize and assure us of your coöperation.

Each locality will add strength to the League. I trust the different localities will recognize the importance of the matter and that the secretaries of the different branches will be prompt with the assessments of 1893-'94, and that we may go actively to work to attain the much-desired success. Hoping to have liberal replies from all branches and localities, I am, very respectfully,

ROBERT J. FRICK,

Secretary Interstate League.

## With the Advertisers.

### Clinical Thermometers.

The rapidity with which definite methods are replacing guesswork in diagnosis is well illustrated in the immense number of clinical thermometers which are being sold. One house alone, H. Weinhausen, of 22 North William street, New York City, is selling clinical thermometers at the rate of six hundred gross per year. In connection with these thermometers Mr. Weinhausen offers free with every order for three dozen clinical thermometers, a valuable plush-lined morocco sample case, containing the following clinical thermometer cases: One solid sterling silver (chased) case, pin and chain; one solid sterling silver end (enamel center) case, pin and chain; one gold plated and enamel case, pin and chain; one gold plated case, pin and chain, and the following clinical thermometers: one Normal Index, magnifying rapid registering; one Regular No. 301 A, magnifying white; one Regular No. 301 B, magnifying black; one Regular No. 342 A, plain white. For fuller details write H. Weinhausen, 22 and 24 North William street, New York. Mention the DRUGGIST AND RECORD.

### Indian Fancy Baskets.

Those pretty little baskets of woven wood, sold throughout this country and Canada wherever semi-civilized Indians are found, were once characterized not only by simplicity of form, but also of color, because the Indians manufactured their own dyes. Now, however, the Indian basket makers use strong chemical dyes, and the baskets glow in all the colors of the rainbow.

In the large assortment of styles there are hampers for soiled linen, scrap or waste paper, covered and open sewing baskets, etc.

At every holiday season the demand has been greater than the supply. As they are very attractive and quite useful, they have proved to sell quicker than any other kinds of fancy baskets.

W. S. Tanner, Lawrence, Kan., the largest dealer in these Indian fancy baskets, gives exclusive sale to one merchant in a city, and if you are handling fancy goods, write him for his illustrated price list, which contains interesting information about the Indians.

### Essential Oils.

Fritzsche Brothers, 34 Barclay street, New York, issue their wholesale price list of essential oils under date September 1, in which they call attention by means of an asterisk (\*) to the oils and chemical preparations recognized by the new U. S. Pharmacopœia, the same as furnished by Fritzsche Brothers, corresponding to all the requirements for strength and purity.

An interesting pamphlet entitled "Schimmel & Co.'s Practical Remarks on

Some New Perfumes and Aromatics," will be mailed on application to any druggist mentioning the DRUGGIST AND RECORD.

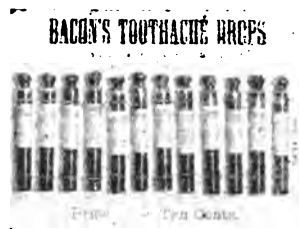
### Where Money is not Valued.

While we are racking our brains over the currency question, and wondering how to get the dollar, and to have it good when secured, it is refreshing to turn to the practice of the Indian laborer on the upper Amazon. He does not know poverty or wealth, and does not care to wander from his locality. His great desire is to obtain some trinket that he has seen, and offer him a silver dollar or a perforated glass bead, and he will take the latter always. Money is not worth attention, his aim being higher in Nature's schedule.

"Whistle back the parrot's call, and leap the rainbows of the brooks,  
Not with blinded eyesight poring over miserable books."—*Hardware.*

### Bacon's Toothache Drops.

The Bacon Mfg. Co., 20 College place, New York, are introducing their "Bacon's Toothache Drops," which is put up in bot-



tles attached to neat cards, fully lettered as illustrated herewith. The article is claimed to be a seller of the readiest kind, and as it allows of a good profit to retailers, should be largely stocked. Many of the toothache preparations of the market being practically devoid of curative properties and little more than catch pennies, their use has more frequently led to disappointment than benefit. The Bacon Mfg. Co. are convinced of the practical value of their preparation and feel sure that once introduced, Bacon's Toothache Drops will steadily gain in the favor of both dealers and the public.

### Hagerty Bros. & Co.'s Annual Catalogue.

The annual catalogue of Hagerty Bros. & Co., manufacturers, importers and exporters of druggists', chemists' and perfumers' glassware, 10 Platt street, New York, which is a handsome little volume of over 300 pages containing illustrations and descriptions of the extensive line of

druggists' glassware, rubber goods, porcelain ware, sundries, fancy goods, etc., that they handle, is just at hand. The catalogue is a most comprehensive one and compares to great advantage with the catalogues of other houses dealing in similar goods. Certainly none of the catalogues which reach us in the course of a year contain more accurate and attractive illustrations. The book is divided into departments, druggists', chemists' and confectioners' shelf and counter ware taking up the first division of the list. The second part is devoted to show bottles, gilded mortars, eagles, etc., and contains 31 illustrations descriptive of the various designs. Glass funnels, percolators, graduated measures, glass mortars, etc., take up some 12 pages, and this is followed by the departments of chemical and philosophical glassware; French and English porcelain and earthenware; druggists' scales, weights, etc., etc., being the standard scales and weights of Henry Troemner, of Philadelphia, most widely known as a manufacturer of scales. Steel spatulas, iron mortars, retort stands, cork presses, pill machines, etc., are also included in this division. Then follows druggists' sundries proper, including clinical thermometers, hypodermic syringes, tablet bottles, seidlitz and insect powder boxes and electro-magnetic machines. Horn scoops, spoons and spatulas, druggists' sieves, house thermometers and medicine chests are described and illustrated further on; and in the next division of the catalogue mention is made of metal syringes, glass syringes, homœopathic vials and sample bottles. The extensive line of hard and soft rubber goods handled by Hagerty Brothers & Co. is next illustrated; funnels, speculums and ear trumpets, all of rubber, are described and illustrated. Hard rubber combs of almost every variety are shown, while the list of soft rubber goods, including nipples, invalid cushions, hot water bottles and rubber stoppers, is most comprehensive. In elastic bulb syringes and atomizers there is a wide variety, as shown by the numerous illustrations. Soda water bottles and tumblers and requisites for the soda fountain generally take up some space; but it is in the departments devoted to cologne bottles, pungents and druggists' prescription vials that Hagerty Brothers & Co. make the best display. These departments alone occupy some 90 odd pages in the catalogue and many new designs in glassware are brought to notice.

Taken all in all this new annual catalogue of Hagerty Bros. & Co. is one which few druggists can afford to be without. We should advise every druggist who has not received a copy to write to Hagerty Bros. & Co. who will be glad to forward one free of charge, if mention is made at the time of writing, of the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD.

## Review of the Wholesale Market.

NEW YORK, September 13, 1893.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

The statistical position of the market for drugs, dyestuffs and chemicals has undergone a marked improvement during the period covered by this week's review, and the financial condition is correspondingly better. As an evidence of the improved condition of things, it may be noted that the different firms of wholesale druggists are now soliciting orders with greater confidence and instructing their traveling salesmen to renew the calls on customers which had been interrupted by the general depression noted in previous reports. There is however, still a notable lack of speculative interest, the trade throughout the country being apparently disinclined to anticipate the probable requirements of the future. Regarding prices, there have been no changes of importance, the market generally being regarded as firm. Alcohol is an exception, having been recently reduced four cents per gallon by the Trust managers.

### DRUGS.

ALCOHOL has been lowered by the combine of producers and the reduction has doubtless been brought about by opposition from the outside, though this is not admitted by the managers of the Trust. Orders can now be placed at \$2.18 @ \$2.22 for grain as to quantity, with the conditional rebate.

ARNICA FLOWERS are steady and in moderate request at 10½ @ 12c.

BALSAMS.—Canada Fir has been in increased request from the hands of exporters, and values have advanced, the current quotation now standing at say \$2.75. Copaiba, Peru and Tolu are firm though without quotable change.

BARKS.—There is no new feature of interest to be noted in this line. Buckthorn is scarce and held at 10c.; Elm 10 @ 12c.; Sassafras 8 @ 8½c., and Soap 3½ @ 4c.

BUCHU LEAVES, short, are in fair jobbing demand within the range of 12 @ 15c.

CASSIA BUDS are in light supply and firm at 18c. for goods of prime quality.

CACAO BUTTER has continued in fair consumptive demand at the quoted range of 32½ @ 34c. as to quantity and brand.

CANTHARIDES are well sustained at 28 @ 30c. for Chinese, and 70 @ 75c. for Russian, though the demand does not exceed jobbing proportions.

CASTOR OIL meets with a steady inquiry upon the basis of 14½ @ 15c. for barrels and 15 @ 15½c. for cases. No. 3 is yet held at 11½ @ 12c. for barrels and 12 @ 12½c. for cases.

CHAMOMILE FLOWERS have continued in good demand and are developing features of firmness. Quoted 18 @ 25c. for German, New, and 10 @ 20c. for Old. Roman, New, are yet quoted 24 @ 26c.

COCA LEAVES are passing out in moderate quantities to consumers upon the basis of 15 @ 18c. for Truxillo and 28 @ 30c. for Huanaca.

COLOCYNTH APPLES are dull at nominally unchanged prices.

CUBE BERRIES have been in active demand, and values are quoted firmer though nominally unchanged. Ordinary is yet held at 22½ @ 25c. and XX 27 @ 30c.

CUTTLE BONE, Trieste, yet offers in instances at 11 @ 12c. The former being an inside figure for quantity lots.

ERGOT has not changed from 38 @ 40c. for Russian and 45 @ 47½c. for Spanish, as to quantity and brand, jobbing sales.

INSECT POWDER is reported in good consumptive demand and firm at 16 @ 22c.

LUPULIN is without special change, being held firmly at previous quotations with fair jobbing transactions.

LYCOPodium is momentarily neglected owing to scarcity; the market is firm, however, upon the basis of 52 @ 55c.

MANNA continues in fair jobbing demand at previous values.

MENTHOL is held with increased firmness owing to scarcity, and many of the holders have advanced their prices, asking as high as \$3.80 for ordinary Japanese.

MORPHINE is well sustained at previous prices and there is a good inquiry for immediate and later delivery.

OPIUM has materially strengthened during the week owing to a spirited and well distributed demand. Holders are now asking \$2.55 @ \$2.60 for case lots and \$2.60 @ \$2.65 for less quantities. Powdered is held and selling at \$3.35 @ \$3 50.

ORANGEPEEL has been attracting some attention during the week and the market is firm at 6 @ 7c.

QUININE has been in active demand with the result of a very firm market. The sales during the week aggregate a larger total than has been reached for some time, fully 100,000 ounces having been disposed of upon the basis of 17½c. cash up to 19c. regular. The nominal cash quotation remains 18c. for 5,000 ounce lots.

SAFFRON, American, shows a firmer feeling, holders asking 27 @ 28c. as to quantity but these figures are a trifle higher than buyers, ideas.

SOAP, Cont's White, is offered freely at about 9½ @ 10c.

SUGAR OF MILK, owing to competitive influences, is somewhat unsettled. The introduction of a new brand brings the quotation down to 11 @ 14c. as to quality and quantity.

TONKA BEANS are in fair consumptive demand and firm at \$1.75 @ \$2.

### DYESTUFFS.

CUTCH continues very quiet, though the market is well sustained at 4¼ @ 4½c. for SM.

DIVI DIVI continues inactive. The quotation ranges from \$45 @ \$55.

GAMBIER is in moderately good request and the tone of the market is reported firmer. Store goods are held at 3¼ @ 4¼c. To arrive 3¼ @ 3½c. will buy, and forward shipments 3½ @ 4c.

SUMAC continues very quiet, without, however, any quotable change in price.

### CHEMICALS.

ARSENIC, white, continues to offer at 3½ @ 3¾c. Red is slightly easier and 6c. has been accepted for small parcels.

BLEACHING POWDER is in easier position; the demand is of good seasonable proportions with store lots realizing 2¼ @ 2½c. as to quantity.

BLUE VITRIOL is firmly held, there being no open offerings of stock at less than 3½c. while up to 3¾c. is wanted for best makes.

BORAX continues fairly active, selling in a moderate way in jobbing lots, the mar-

ket being well sustained at 8¼ @ 8½c. for City Refined or Powdered.

BRIMSTONE is in unchanged position; best seconds are scarce, there having been no recent arrivals. Forward shipments of Sicily are quoted \$17.50 @ \$17.62½.

CARBOLIC ACID continues in limited demand though offering freely upon the basis of 13¼ @ 14c. in bulk and 19 @ 20c. in pound bottles.

CAUSTIC SODA is in moderate demand with the current sales of 70 to 74 per cent. at \$2.80 @ \$2.85.

CHLORATE OF POTASH continues inactive, there being only a moderate inquiry at the quoted range of 14¼ @ 15c. for crystals and powdered.

CITRIC ACID is being urged from second hands, and down to 45c. is quoted for kegs.

CREAM TARTAR is meeting with a moderate distributive sale at manufacturers' quotations.

NITRATE OF SODA is quiet. For carload lots \$1.70 @ \$1.75 continue the figures, though the inside price could be shaded, perhaps, on a firm bid for larger quantities.

OXALIC ACID is passing out freely in jobbing quantities within the range of 6½ @ 6¾c.

QUICKSILVER is a trifle easier, but the market is still upon the basis 51 @ 53c.

SAL SODA is in fair demand, with the current sales at \$1.05 @ \$1.15 for domestic.

TARTARIC ACID continues dull and nominally unchanged from manufacturers' prices.

### ESSENTIAL OILS.

ANISE continues without change of consequence; small sales at \$1.40 @ \$1.45.

BERGAMOT is finding a moderate outlet at the previous range—say \$1.80 @ \$2.75—as to brand and quantity.

CASSIA continues quiet and without feature of interest, the current quotations remaining 75 @ 80c.

CLOVE is in fair inquiry though no quotable change is reported.

CUBE continues dull though offerings are made down to \$2.25.

LEMON AND ORANGE are wanted to a limited extent only. We quote the range at \$1.15 @ \$2.10 as to brand for the former, and \$1.40 @ \$1.65 for the latter.

PEPPERMINT, GHG, has been in fair demand and offering at \$2 50 @ \$2.55, though some holders are firm at \$2.60. Bulk Western is quoted down to \$2.25, but important inquiry is lacking. The same may be said of Wayne County, which offers down to \$2.40.

SASSAFRAS is rather slow of sale, though prices have undergone no alteration. The nominal quotation yet standing 36 @ 41c. for Pure and 28 @ 30c. for Artificial.

WINTERGREEN is quiet, though without quotable change.

### GUMS.

ASAFETIDA is developing a firmer tone, the available supply becoming lessened; small sales at 10 @ 18c., the outside price for Calcutta.

ARABIC is without important change either as regards demand or price. Sorts continue to offer at 12½ @ 13c., though some holders decline to shade the outside figure.

CAMPOR, refined, is offering from the hands of manufacturers at 46 @ 47c. in

cases, but these figures are shaded by outside holders, who are prepared to accept orders at 45 @ 46c.

CHICLE remains dull and weak, though without quotable change.

GUAIAC is in moderate demand, with the current sales at 16 @ 25c. as to quality and quantity.

SHELLAC is in improved position, the consuming demand being of better proportions, but no important price changes are to be noted.

TRAGACANTH continues dull within the range of 35 @ 60c. as to quality.

#### ROOTS.

ACONITE, ALKANET and ALTHAEA remain quiet at nominally unchanged prices.

ARNICA is finding sale in jobbing quantities at 12 @ 13c.

BELLADONNA, German, is maintained at 9 @ 12c. with a fair inquiry reported.

GENTIAN is scarce and held at 4c.

GINGER, Jamaica, is meeting with moderate inquiry on the basis of 14 @ 15c. for unbleached and 15½ @ 16c. for bleached.

GOLDEN SEAL is jobbing fairly within the range of 20 @ 21c.

IPECAC has been fairly active at the previous quotations, say \$1.35 @ \$1.40.

JALAP continues quiet and nominally unchanged at the previous range.

ORRIS ROOT is slightly easier at primary

sources. Owing to continued absence of demand, prices here have undergone no change.

SARSAPARILLA, Mexican, is weakening, though no important price changes are reported.

SENEGA appears to be in better inquiry, but the range is nominally unchanged at 36 @ 38c. for Minnesota.

#### SEEDS.

ANISE does not change from 9 @ 9½c., though some holders maintain the price at the outside figure.

CANARY is dull and the market easy in tone. Smyrna held at 2½ @ 2¾c.

CARAWAY, Dutch, yet offers at 6½ @ 7c.; there is, however, little inquiry.

CELERY continues dull, though steady at 11 @ 12c.

CORIANDER is steadily held at 3¼ @ 3½c. for bleached and 3c. for unbleached, with a fair jobbing business at this range.

HEMP, Russian, remains quiet, but the market appears well sustained at 2¼ @ 2½c.

MUSTARD, California Yellow, is somewhat scarce, no new crop having come to hand. The market is reported steady at 6c.

QUINCE, German, has been inquired for to some extent during the week and the market appears well sustained at 37 @ 40c.

Mr. Minks (out for a walk)—What a fearful lot of ugly people there are in the world.

Mrs. Minks—Well, no wonder. These patent medicine doctors are always curing em.

The Economical Drug Co., of Chicago, for which a receiver in bankruptcy was recently appointed, has passed to the second stage—downright assignment. So may all cutters perish!

A self-admitted bogus check swindler recently stood before a local magistrate and claimed that he was the Duke of Ipecac! He will probably, next, throw himself up—on the mercy of the court.—*P. C. P. Alumni Report.*

We were favored this week with a visit from Wm. Martindale, of London, Eng., who has reached this city on his way back to England from Chicago, where he took prominent part in the Seventh International Pharmaceutical Congress. He sails for England by the Lucania on Saturday.

Miss Modeste Hargis, daughter of Dr. R. B. S. Hargis, of Pensacola, Fla., has stood the required examination and been licensed as a registered pharmacist by the Florida State Board of Examiners. Miss Hargis is said to be the only licensed lady pharmacist in Florida and is the youngest druggist in the State.

## Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted free of charge. Write distinctly, on one side of paper only, and do not use postal cards.*

### POSITIONS VACANT.

WANTED—Young man as prescription clerk (license) and to do general work of pharmacy; work not heavy and hours easy; position open Oct. 1; give references and state salary expected. Address Norton & Co., Port Jefferson, N. Y.

### POSITIONS WANTED.

PHARMACISTS RELIEF—For evenings only. J. Maxwell MacDonald, 339 Dean street, Brooklyn.

POSITION WANTED by a manufacturing chemist; a large and thorough experience with pharmaceutical and chemical preparations; satisfactory reference given. Address "Chemist," care of AMERICAN DRUGGIST, 37 College place, New York.

GRADUATE OF N. Y. C. P. wants position as clerk in good drug store (Southern N. Y. or Northern Penn. preferred); will be open for engagement Sept. 15; "A." references. Address "C. D. B.," care of A. J. Pratt, Westville, Otsego Co., N. Y.

JUNIOR DRUG CLERK, with 2 years' city and country experience, desires to make a change; good habits; moderate wages; night work preferred. Address "Agathin," 271 Clermont avenue, Brooklyn, N. Y.

DRUG CLERK—American, middle aged, N. Y., licentiate, twenty years' experience city and country good business qualifications, desires permanent position in country at moderate salary; Western New York preferred. Address for ten days, "Pharmacist," General Delivery, Bath, Steuben County, N. Y.

DRUGGIST—Junior, a young man 19, wishes permanent position city or country; has had 2½ years' experience in first-class stores; best of reference from last employer. Address Harry Travers, Box 38, Argyle, Washington County, N. Y.

A young medical student with over a year's experience in a pharmaceutical laboratory, and who is thoroughly conversant with materia medica, desires position in a drug store (New Jersey preferred); reasonable expectations. "Medical," 370 Central avenue, Newark, N. J.

A PHARMACIST, eighteen years' experience as clerk and proprietor, being obliged to give up retail business on account of health, desires road position with reliable house; is thoroughly familiar with best methods of conducting detail work among physicians; age 35; reliable in every respect. Address "Phenocoll," care of AMERICAN DRUGGIST, 37 College place, New York.

WANTED POSITION in chemical or pharmaceutical laboratory, by a graduate; five years' experience; good references; scientific work preferred; familiar with microscopical and chemical analysis; position most desirable in larger cities; Boston, New York or Brooklyn preferred. Address C. L. Grace, care of AMERICAN DRUGGIST, 37 College place, New York.

SITUATION WANTED.—Young man (23), married, wishes situation by Jan. 1, 1894, as manager of retail drug store in Penna., New York City or Maryland; graduate of P. C. P. Address "K," 437 Green street, Phila.

SALESMAN—A druggist, well acquainted throughout Pennsylvania, with experience on the road, desires a position to represent wholesale druggist or druggist specialty house on either salary or commission; good references. Address "Salesman," care AMERICAN DRUGGIST, 37 College place, N. Y.

A GRADUATE of the Ontario College of Pharmacy and Phm.B. of University of Toronto wants position as assistant. F. O. Wilkinson, 44 McGill street, Toronto, Canada.

SITUATION WANTED by clerk speaking both German and French fluently; 3½ years' experience in store, and 5 years student of medicine; salary moderate. J. Baumgartner, 87 Varick street, New York City.

WANTED—Permanent situation in city by a graduate of I. C. P., '93; speaks German, and can furnish best of references. Address "Druggist," Box 304, Richmond, Ky.

POSITION WANTED—Position desired by a thorough manufacturing and analytical chemist in the chemical department of a drug house; have had experience as manager; highest references. Address "W. W.," Chemist, Room 37, at 97 Water street, New York City.

WANTED—A situation by a young man who has had 3 years' experience as assistant clerk; best references. Address H. Malarky, 337 West 51st street, New York.

SITUATION WANTED—By graduate N. Y. C. P. registered in N. Y., N. J., and Pa.; 10 years' experience; married; age 28; not afraid of work; state salary. "Druggist," 205 East 2d street, Jamestown, N. Y.

SITUATION WANTED by clerk; four years' experience in good Canadian store; wholesale preferred. R. Rutherford, Simcoe, Ont.

DRUG CLERK, 9 years' experience, desires to make a change about the 1st October, to go South preferable; speaking English and Spanish. Address "A. K.," care of PHARM. RECORD.

### BUSINESS OPPORTUNITIES.

FOR SALE.—We have for sale a large number of drug stores in various parts of the country. Before buying consult us. No charge to purchasers. The Pharmaceutical Exchange Bureau, 1501 Arch St., Philadelphia, Pa.

DRUG STORE in Jersey City; net profits \$1,800 per year; will take \$1,800 cash; rare bargain; satisfactory reason. "Pepain," AMERICAN DRUGGIST, 37 College place, New York.

FOR SALE—A drug store in a good growing town in Pennsylvania; no opposition; price \$2,000, one-fourth cash, balance in one year with interest to be secured by note with two securities; must sell at once. Address "Reva," care AMERICAN DRUGGIST, 37 College place.

FOR SALE at inventory, about \$3,500; best located drug store in California; county seat of 9,000, on the Pacific coast; magnificent climate; average Winter temperature 54°; sales \$50 daily; no cutting; full information given; overland fare allowed if sale is made. Address "Pacific," care of AMERICAN DRUGGIST, 37 College place, New York.

WANTED by young man capital to start up or buy out a drug store in Penna., or would buy a store on easy terms. Address R. W. Kottka, S. E. cor. 8th and Green streets, Phila.

DRUG STORE in New Jersey; big bargain if bought at once. "Borax," care of AMERICAN DRUGGIST, 37 College place, New York.

FOR RENT—Corner store on Columbus avenue—plumbed and suitable for a drug store; exception, ally good neighborhood; extra inducements offered to the right party. For particulars apply to R. L. Julian, with Chas. E. Schuyler, No. 238 Columbus avenue, cor. 71st street, New York.

I WANT TO Buy a drug store in city or country doing \$50,000 or \$50,000 a year; will give in exchange good improved real estate. Address "Hawkins," 33 Orchard street, Newark, N. J.

DRUG STORE WANTED.—Country or City, doing \$15,000 to \$50,000 yearly; will exchange for improved property. Address "Hawkins," 33 Orchard street Newark, N. J.

Clerks and Employers should call at this office, register their wants and examine our list of POSITIONS WANTED, POSITIONS VACANT and BUSINESS OPPORTUNITIES, which can be consulted free of charge.

Kindly mention this Journal when writing to Advertisers.

# ORIGINAL PACKAGE PRICES.

It should be understood that the prices quoted in this column are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a considerable range of prices.

## Drugs, Chemicals, &c.

|  |  |  |  |
|--|--|--|--|
| Acetanilid, bulk, per lb. .38 @ .41                        | Codeine, eights .4.65 @ . . .                    | Nux Vomica, lb. .03% @ .04                             | Cardamon, Malabar, per lb. .75 @ .85               |
| " lb., per lb. . . . . .58                                 | Cod Liver Oil, Norwegian, bbls. .18.50 @ 22.50   | Nutgalls, China, per lb. .13 @ .13%                    | Colchicum, lb. .12 @ .14                           |
| " oz., per oz. . . . . .06%                                | Colocynth: . . . . .                             | Aleppo, per lb. .13% @ .14                             | Coriander, lb. .06% @ .07%                         |
| Acetate of lime: . . . . .                                 | Trieste, lb. .30 @ .38                           | Oils, Essential: . . . . .                             | Cumin, lb. .11 @ .12                               |
| Brown, per 100 lb. .90 @ .95                               | Spanish, .20 @ .22                               | Anise . . . . . 1.35 @ 1.40                            | Fennel, Germ., lb. . . . . .12                     |
| Gray, per lb. .01% @ .01%                                  | Copperas, per 100 lb. .75 @ .90                  | Almonds, Bitter . . . . . 7.50 @ . . .                 | Flax Meal, per lb. . . . . .08                     |
| Acids: . . . . .   | Cr. Tartar, Crystals, lb. .18% @ .19             | " Sweet . . . . . .80 @ .43                            | Foenugreek, lb. .02% @ .03                         |
| Acetic Com'l . . . . . 0.4% @ .08                          | Powdered, lb. .19 @ .20                          | Bay, per lb. .3.50 @ 4.00                              | Hemp, Russian, lb. .02% @ .03                      |
| Aqua fortis, 36 deg. . . . . 0.3% @ .03%                   | Cubeb Berries, XX, lb. .27 @ .30                 | Bergamot . . . . . 2.00 @ 2.75                         | Mustard, yel. Cal. lb. .06% @ .07%                 |
| " 40 . . . . . 0.1% @ .04%                                 | Ordinary, lb. .22% @ .25                         | Cajeput, Native . . . . . .45 @ .55                    | lb. . . . . .03% @ .04%                            |
| Benzoic, German . . . . . 0.47 @ .54                       | Cutch, bales, SM, lb. .04% @ .04%                | Campbor . . . . . .07 @ .08                            | Poppy, per lb. . . . . .07% @ .08                  |
| " English . . . . . 0.49 @ .54                             | Cuttle bone, Trieste, lb. .11 @ .12              | Cassa . . . . . .75 @ .82%                             | Quince, German, lb. .45 @ .50                      |
| Boracic, Whole . . . . . 0.13 @ .14                        | Jewelers' lb. .31 @ .32                          | Citronella, Native . . . . . .24 @ .28                 | Rape, German, lb. .03% @ .03%                      |
| " Powdered . . . . . 0.13% @ .14                           | Dextrine . . . . . 0.04% @ .05                   | Clove . . . . . 5.5% @ .55                             | Rape, English, lb. .05% @ .06                      |
| Citric, American . . . . . 0.45% @ .46                     | Divi Divi, per ton . . . . . 45.00 @ 55.00       | Copaiba . . . . . .70 @ .75                            | Soap, Castile, Mars, mottled, pure, lb. .06 @ .06% |
| " English . . . . . . . . . .                              | Dragon's B'd, lump, lb. .45 @ .50                | Croton . . . . . .75 @ .80                             | White, lb. .09% @ .10                              |
| Carbolic Crystals, bulk . . . . . 0.13% @ .17%             | In reeds, lb. .45 @ .50                          | Cubeb . . . . . 2.25 @ 2.50                            | Soda Ash, lb., 48% per 100 lb. .1.50 @ 1.80        |
| lb. bottle . . . . . . . . . .                             | Epsom Salts, per 100 lb. 1.00 @ 1.10             | Erigeron, per lb. .1.45 @ 1.60                         | Squilla, white, lb. .04% @ .06                     |
| Muriatic, 18.25 deg. . . . . 0.90 @ 1.37%                  | Ergot: . . . . .                                 | Germanium Chiriz. . . . . 4.50 @ 7.50                  | Sugar Milk, powder, lb. .11 @ .14                  |
| Nitric, 36 degrees . . . . . 0.04% @ .04%                  | Spanish, lb. . . . . .45 @ .47%                  | Lavender . . . . . 1.80 @ 1.85                         | Sugar Lead, white, lb. .11 @ .11%                  |
| " 40 . . . . . 0.04% @ .04%                                | Ergotine, Domestic . . . . . 4.00 @ . . .        | " Garden . . . . . .40 @ .90                           | " Lead, brown, lb. .05% @ .06                      |
| Oxalic, English . . . . . 0.06% @ .06%                     | German . . . . . 4.00 @ . . .                    | Lemon, as to brand . . . . . 1.35 @ 2.10               | Sulphate Ammonia, per 100 lb. 2.90 @ 3.00          |
| " German . . . . . 0.06% @ .06%                            | Flowers: . . . . .                               | Lemongrass . . . . . .75 @ .80                         | Do. Potash, 48% per lb. 1.11% @ 1.15               |
| Picric . . . . . .26 @ .26%                                | Arnica Flowers, per lb. 1.10% @ .12              | Musk, per lb. .7.00 @ 8.00                             | Do. Potash, 90% per lb. 2.10 @ 2.15                |
| Salicylic . . . . . 1.00 @ 1.22                            | Chamomile . . . . .                              | Myrrane . . . . . .17 @ .19%                           | Sulphur, Roll . . . . . . . . . .                  |
| Sulphuric . . . . . 1.00 @ 1.25                            | Roman, New, lb. .18 @ .25                        | Neroli . . . . . .22.00 @ 29.00                        | " Flour . . . . . . . . . .                        |
| Tartaric, Crystals . . . . . 0.22% @ .23                   | Roman, lb., old . . . . . 12 @ .20               | Nutmeg . . . . . 1.75 @ 2.75                           | Spirits Nitre, U. S. F. . . . . .39 @ .40          |
| " Powdered . . . . . .23 @ .24                             | Lavender Flowers . . . . .                       | Orange . . . . . 1.50 @ 1.65                           | Spirit Ammonia, Arom. . . . . .44 @ .45            |
| Tannic . . . . . 1.05 @ 1.20                               | Ordinary, per lb. .04 @ .08                      | Origanum . . . . . .25 @ .25                           | Sulphuric Ether . . . . . .34 @ .61                |
| Alcohol, Grain, per gal. 2.18 @ 2.22                       | Select, per lb. .15 @ .65                        | Pennyroyal . . . . . 1.40 @ 1.50                       | Sunac, Sicily, ton . . . . . 72.50 @ 77.00         |
| (Less rebate) . . . . .                                    | Gambier, lb. . . . . .04 @ .04%                  | Peppermint, bulk . . . . . 2.25 @ 2.20                 | " Virginia . . . . . 43.00 @ 47.50                 |
| Wood, 95.07% . . . . . 1.40 @ 1.45                         | Glycerin, bbls, lb. .13% @ .14                   | " HGH. . . . . 7.50 @ 8.00                             | Tar Barbadoes, gal. . . . . .45                    |
| Alum, Lump, per 100 lb. 1.75 @ . . .                       | " cases, lb. .14 @ .16%                          | Rose . . . . . .7.50 @ 8.00                            | Tin Crystals, bbls, per lb. .15 @ . . .            |
| Ground, per 100 lb. 1.85 @ 1.85                            | Grains, Paradise, lb. .07 @ .07%                 | Sandalwood . . . . . . . . . .                         | Jara, per lb. . . . . .17 @ . . .                  |
| Antifebrine per oz. . . . . .19 @ .20                      | Guarana, lb. . . . . 1.05 @ 1.10                 | Sassafras . . . . . .36 @ .41                          | Tonka Beans, Angost. . . . . 1.75 @ 2.00           |
| Antipyrene, per oz. . . . . 1.80 @ 1.40                    | Gums: . . . . .                                  | Sassafras, Artificial . . . . . .28 @ .30              | Tonka Beans, Para, lb. .55 @ .65                   |
| Arrow root, Berm., lb. .24 @ .25                           | Aloes, Barb., lb. . . . . .06 @ .12              | Spearmin. . . . . 1.50 @ 1.90                          | Turpentine, Spirits . . . . . 31 @ .32             |
| St. Vincent, in bbl., lb. .11 @ . . .                      | " Cape, lb. . . . . .05% @ .08                   | Tansy . . . . . 2.00 @ 3.00                            | Vanilla Beans, lb. . . . . 6.00 @ 11.00            |
| Arsenic: . . . . .   | " Curacao, lb. . . . . .08% @ .03                | Wintergreen . . . . . 1.62% @ 1.70                     | " cut, lb. . . . . 4.50 @ 5.25                     |
| Red Saxon, lb. . . . . .05% @ .06%                         | " Socotrine, lb. . . . . .28 @ .40               | " Artificial . . . . . 1.10 @ 1.15                     | Venice Turpentine, barrels, lb. . . . . .18 @ .20  |
| White . . . . . 0.03% @ .03%                               | Arabic 1st picked . . . . . .50 @ .55            | Wormwood . . . . . .25 @ 3.75                          | Cans, lb. . . . . .10 @ .20                        |
| Balsam, Copaiba, lb. .30 @ .38                             | " and . . . . . .36 @ .40                        | Opium, Natur'l, ca. per lb. 2.55 @ 2.60                | Wax, Brazil, Veg., lb. .09% @ .17%                 |
| Fir, Canada, gal. . . . . 2.55 @ 2.75                      | Arabic, sorts . . . . . 1.2% @ .13               | Opium, Ordinary . . . . . 2.60 @ 2.65                  | Japan, lb. . . . . . . . . .                       |
| Fir, Oregon, gal. . . . . .75 @ .80                        | Asafoetida, lb. . . . . .10 @ .20                | Opium, Powd., per lb. 3.35 @ 3.50                      |  |
| Peru, lb. . . . . 1.35 @ 1.50                              | Benzoin, lb. . . . . .26 @ .38                   | Phenacetine, per oz. . . . . .85 @ .90                 |  |
| Tolu, lb. . . . . . . . . .23                              | Chicle, lb. . . . . .26 @ .28                    | Prussiate Potash, Yel. low, per lb. . . . . .21% @ .22 |  |
| Bark, Buckthorn, per lb. .10 @ . . .                       | Gamboge, lb. . . . . .55 @ .60                   | Red, per lb. . . . . .39 @ .42                         |  |
| Cacaca Sagrada, lb. .07 @ .08                              | Guaiac, lb. . . . . .17 @ .25                    | Quicksilver, flasks, per lb. . . . . . . . . .         |  |
| Elm, lb. . . . . .10 @ .12                                 | Kino, lb. . . . . .75 @ 1.00                     | Quinine: . . . . .                                     |  |
| Orange peel . . . . . .06 @ .07                            | Mastic, lb. . . . . .75 @ 1.00                   | Domestic, bulk, oz. . . . . .22 @ .23                  |  |
| Sassafras, per lb. . . . . .08 @ .08%                      | Myrrh, lb. . . . . . . . . .38                   | Domestic, ozs. . . . . .28 @ .29                       |  |
| Soap, lb. . . . . 0.03% @ .04                              | Olibanum, sorts, lb. . . . . .05% @ .06%         | German, bulk . . . . . 1.8% @ .10                      |  |
| Bicarb. Soda, Engl., lb. 0.03% @ .03%                      | " tears, lb. . . . . .11 @ .13                   | German, ozs. . . . . .27% @ .29                        |  |
| domestic, lb. . . . . 2.90 @ 3.00                          | Sandrac, lb. . . . . .29 @ .30                   | Roots, Aconite, lb. . . . . .09 @ .14                  |  |
| Bichromate, Pot'h, lb. 1.04% @ .11                         | Senegal, picked, lb. .14 @ .16                   | Althea, cut, lb. . . . . .15 @ .18                     |  |
| Bismuth, Sub. Nit., per lb., bulk . . . . . 1.95 @ 2.00    | Shellac, DC, lb. . . . . .37 @ .40               | Alkanet, lb. . . . . .06 @ .07                         |  |
| Bismuth, Sub. Carb., per lb., bulk . . . . . 2.25 @ 2.30   | " VSO, lb. . . . . .30 @ .30                     | Arnica, lb. . . . . .12 @ .13                          |  |
| Bleach'g Powd., per lb. .02% @ .03                         | " Diam'd I, lb. . . . . .29 @ .29                | Beladonna Ger., lb. . . . . .08 @ .12                  |  |
| Blue Vitriol, lb. . . . . .03% @ .03%                      | " SS, lb. . . . . .28% @ .29                     | Blood, lb. . . . . .05 @ .06                           |  |
| Borax, refined, lb. . . . . .08 @ .08%                     | " TN, lb. . . . . .26 @ .26                      | Calamus, lb. . . . . .07 @ .08                         |  |
| Concentrated, lb. . . . . 0.07% @ .08                      | " Garnet . . . . . .24 @ .24                     | Calamus, bleac'd, lb. . . . . .21 @ .24                |  |
| Brimstone, best ad, ton 19.00 @ 19.50                      | " Bleached, lb. . . . . .26 @ .27                | Colchicum, per lb. . . . . .14 @ .18                   |  |
| Bromide Potash, Domestic, b'k, lb. . . . . .33 @ .34       | Tragacanth, Aleppo, lb. .30 @ .58                | Colombo, lb. . . . . .06% @ .11                        |  |
| bottles, lb. . . . . .39 @ .40                             | Harlem Oil . . . . . . . . . .2.50               | Dandelion, Germ. lb. . . . . .07% @ .08                |  |
| Bromide Ammonium, bulk . . . . . . . . . .43               | Indigo, lb. . . . . .45 @ 2.00                   | Dogwood, lb. . . . . .08 @ .10                         |  |
| Bromide Sodium, b'k. . . . . .38                           | Insect Flowers . . . . . .18 @ .20               | Galangal, lb. . . . . .04% @ .04%                      |  |
| Bromine, bulk . . . . . .38 @ .42                          | Insect Powder pure, lb. .16 @ .22                | Gentian, lb. . . . . .03% @ .04                        |  |
| Burgundy pitch, per lb. 0.02% @ .02%                       | Iodide Potash, bulk, lb. 2.70 @ 2.75             | Ginseng, lb. . . . . 1.75 @ 2.75                       |  |
| Cacao Butter: . . . . .                                    | Japan, lb. . . . . .47% @ .60                    | Ginger, Jamaica, b'ld., lb. . . . . .17 @ .20          |  |
| 12-lb. boxes, lb. . . . . .30 @ .31%                       | Juniper Berries, lb. . . . . .01% @ .02%         | Ginger, Jamaica, unb'ld., lb. . . . . .14 @ .17        |  |
| Dutch A., per lb. . . . . 3.2% @ .34                       | Leaves: . . . . .                                | Golden Seal, lb. . . . . .20 @ .21                     |  |
| Caffeine . . . . . 1.95 @ . . .                            | Belladonna, per lb. .10% @ .12                   | Hellebore, powd., lb. . . . . .07% @ .08               |  |
| Campbor, ref'd, bbls., lb cases, lb. . . . . .48% @ .49    | Buchu, short, lb. . . . . .12 @ .15              | Ipecac, lb. . . . . 1.27 @ 1.30                        |  |
| Cantharides, Chinese, lb. .28 @ .30                        | " long, lb. . . . . .33 @ .40                    | Jalap, lb. . . . . .21 @ .24                           |  |
| Russian, lb. . . . . .70 @ .75                             | Coca, prime, lb. . . . . .15 @ .30               | Kava Kava, lb. . . . . .30 @ . . .                     |  |
| Carb. Ammonia . . . . . 0.08% @ .09                        | Damiana, lb. . . . . .27 @ . . .                 | Licorice, select, lb. . . . . .08 @ .15                |  |
| cases, lb. . . . . . . . . .                               | Hyoeyamus . . . . . .09 @ .11                    | " Pow'd., lb. . . . . .05 @ .12                        |  |
| Cassa Buda, lb. . . . . .18 @ . . .                        | Jaborandi, lb. . . . . .40 @ .50                 | Lovage, lb. . . . . .50 @ .55                          |  |
| Castor Oil, cases, lb. . . . . .15 @ .15%                  | Senna Alex natr'l, lb. .14 @ .16                 | Mandrake, lb. . . . . .03% @ .04                       |  |
| Barrels, lb. . . . . 1.4% @ .15                            | Senna Alexgarbled lb. .22 @ .27                  | Orris, Florentine, lb. . . . . .25 @ .35               |  |
| Caustic Soda, 70%, 100 lb. 2.70 @ 2.82%                    | Senna Tinney, lb. . . . . .07 @ .20              | Orris, Verona . . . . . .12 @ .14                      |  |
| Caustic Soda, 60%, 100 lb. 2.90 @ 3.10                     | Stramonium . . . . . 0.05% @ .08                 | Pink, lb. . . . . .22 @ .25                            |  |
| Chalk, Engl. Precip., bulk, lb. . . . . .04 @ .06          | Licorice, P. & S., lb. .24 @ . . .               | Rhubarb, whole, lb. . . . . .70 @ .80                  |  |
| Chloral Hydrate Crystals, bulk, per lb. . . . . .95 @ 1.05 | Lupulin, German . . . . . 70 @ 1.75              | Sarsaparilla, Hond. lb. . . . . .30 @ .42%             |  |
| Hydrate crusts, bulk, per lb. . . . . .02 @ 1.00           | Lycopodium, lb. . . . . .52 @ .55                | Sarsaparilla, Mex., lb. . . . . .09% @ .10             |  |
| Chlorate Pot. Cry., lb. .15 @ 15%                          | Manna, large flake, lb. . . . . .1.25 @ .1.25    | Senega, lb. . . . . .35 @ .36                          |  |
| Pow'd, lb. . . . . 1.5% @ 1.5%                             | Small flake, lb. . . . . .42 @ .45               | Serpentaria, lb. . . . . .20 @ .22                     |  |
| Chloroform, Bulk, lb. . . . . .50 @ .51                    | Menthol, Japanese . . . . . 3.80 @ . . .         | Valerian, Belgian, lb. . . . . .07 @ .07%              |  |
| Cinchonidine, Sulphate of, German, oz. . . . . .02 @ .02%  | Mercurials: . . . . .                            | " German, lb. . . . . .10 @ .12                        |  |
| Citrate U.S.P. Iron, lb. . . . . .59 @ . . .               | Blue Pill, lb. . . . . .34 @ . . .               | Saffron, Amn., lb. . . . . .25 @ .35                   |  |
| Soluble . . . . . . . . . .55                              | Calomel, lb. . . . . .71 @ . . .                 | Spanish, Valencia, lb. 6.50 @ 7.00                     |  |
| Iron and Ammonia, lb. . . . . .50 @ . . .                  | Cor. Sublimite, lb. . . . . .62 @ . . .          | Spanish, Alicante, lb. 5.00 @ 5.50                     |  |
| Iron and quinine . . . . . 1.50 @ . . .                    | Mercury and Chalk . . . . . 30 @ . . .           | Sal Ammoniac, lump, lb. .08% @ . . .                   |  |
| Iron and strychnine . . . . . 2.00 @ 2.05                  | Qintment, lb. . . . . .30 @ .39                  | Do. Granulated, lb. . . . . .05% @ .09                 |  |
| Phosphate, U. S. P., lb. . . . . .57 @ . . .               | Red Precipitate, lb. .81 @ . . .                 | Sal Soda, Eng., 100 lb. 1.02% @ 1.05                   |  |
| Pyrophos, U. S. P., lb. . . . . .55 @ . . .                | White lb. . . . . .86 @ . . .                    | " American . . . . . .90 @ .95                         |  |
| Pyrophos, Soluble, lb. . . . . .55 @ . . .                 | Morphine, bulk, oz. 1.90 @ 2.05                  | Salt peter, crude, per lb. .04% @ .05                  |  |
| Potash, per lb. . . . . .49 @ . . .                        | Eights, oz. . . . . 2.25 @ 2.30                  | Salt peter, Refined, per lb. . . . . .06 @ .08         |  |
| Soda, per lb. . . . . .49 @ . . .                          | Moss, Irish, lb. . . . . .06 @ .06%              | Seeds, Anise, Ital. lb. . . . . .06 @ .10              |  |
| Enbait, pow'd, lb. . . . . .10 @ .18                       | Irish, bleached, lb. .13 @ .15                   | Anise, German, lb. . . . . .06 @ .06%                  |  |
| Saline Muriate, per oz. 5.25 @ 6.20                        | Muriate Potash, per 100 lbs. . . . . 1.78 @ 1.85 | Anise, Star, lb. . . . . .22 @ .23                     |  |
| Codeine, bulk, oz. . . . . 4.15 @ . . .                    | Naphthaline, flake, per lb. . . . . 0.03% @ .05  | Canary, Smyrna, lb. . . . . .3% @ .03%                 |  |
|  | Naphthaline, Ball, per lb. . . . . .03% @ .05    | Canary, Sicily, lb. . . . . .00% @ .04                 |  |
|  | Nitrate Silver, oz. . . . . .48 @ .40%           | Caraway, lb. . . . . .06% @ .07                        |  |
|  | Nitrate Soda, 100 lb. .1.65 @ 1.80               | Cardamon, Aleppy, per lb. . . . . .65 @ .75            |  |
|  |  | Celery, lb. . . . . 1.10% @ .11                        |  |

# American Druggist and Pharmaceutical Record.

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WHOLE No. 265.

## AMERICAN DRUGGIST PUBLISHING COMPANY.

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A. R. ELLIOTT, PRESIDENT.

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*Liberal Commissions to Club Agents.*

## DANGER TO NIGHT CLERKS.

IN Chicago the qualifications for the position of night clerk in the drug store must be amended so that an advertisement for that functionary would hereafter read thus:

WANTED AS NIGHT CLERK, in a Chicago pharmacy, a well qualified, reliable, and competent clerk. Must be in good training, weigh not less than 180 lbs., be able to stand up with Sullivan four rounds, be quick and accurate at dispensing prescriptions and 32-calibre bullets, a reliable hand at drawing either soda water or bowie knife, have experience in handling the pestle and the s'ung shot. Address Dr. Carver, care Wild West Show.

Such qualifications would have saved Harry Warner, a night clerk at the store of E. A. Holroyd, at Eighteenth street and Wabash avenue, Chicago, from being nearly killed by robbers on a recent Sunday. He was attacked, but bravely defended the store until left unconscious with a bullet through his cheek and with his head almost beaten to a jelly.

Seriously, it is a blot upon our civilization that vulgar ruffians should be allowed to add the element of personal danger to the already onerous task of the drug clerk engaged in his humanitarian duty of ministering to the wants of the sick.

IN commenting on the proposed International Pharmacopœia, an English contemporary says that this pharmacopœia has already been made once “by resolution.” The fact that the Americans are willing to back their resolutions with their dollars, argues well for their earnestness in the matter, and it is to be hoped that Europe is less apathetic than the *Chemist and Druggist* believes it to be.

## THE PHARMACIST IN LITERATURE AND POLITICS.

ONE of the remarkable things about pharmacy and its followers is the minor part which both have played in the great events of contemporaneous history; this with especial reference to the departments of literature and politics. While it is true that many of the authors who have gained fame and attained to distinction have boasted of a passing knowledge of the pestle and mortar in the days of their callow youth, none, we believe, have acquired fame either as politicians or *litterateurs* while engaged in the active practice of the art pharmaceutic. The underlying factors in the non success of pharmacists in the world of literature and of politics is, of course, no secret to those who are familiar with the lot of the average dealer in pills and potions. His life is apt to become humdrum in character and his field of vision narrowed; and this by the very nature of his duties which are invariably such as to necessitate the giving of his undivided attention to the affairs of business. The exceptional characters who have contrived in the course of a busy lifetime to make their names known in domains outside of pharmacy have been few and far between.

We would like to have our readers look up the subject and write to us regarding pharmacists who have served their country in the Senate; pharmacists who have shone in literature; as well as regarding books in which the heroes or prominent personages are pharmacists or persons connected with the profession.

“BARBADOES Aloes will be no new thing to George Trail Tate, the newly appointed Consul to the Barbadoes.” Thus reflecteth the *Philadelphia Ledger* on the appointment of a pharmacist to a public post.

IN our news notes we present an interesting and vigorous defense of American pharmacy as contrasted with that calling in England. Such championship we are pleased to see and more particularly since it appeared in an English journal where it would reach a large English audience.

## Finds it a Necessity.

Please renew my subscription for AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD, for which I incline close check. I find it more and more a necessity and feel that I could not get along without it.—Wm. A. Gifford, 6 Granite Block, Fall River, Mass.

### Dragon's Blood.

An article which appeared in the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD of August 31, p. 139, is the subject of an article by Professor Flückiger in a recent number of the *Pharmaceutical Journal and Transactions*. He remarks that Monardes is quoted as the first author who mentioned American dragon's blood. In his "Primera y segunda y tercera partes de la Historia medicinal de las cosas que se traen de nuestras Indias Occidentales que sirven en Medicina," Sevilla, 1574, page 78, the figure "El dragon" shows three pods of a tree from which the drug was collected in the time of Monardes, in the country of Carthage. One of the pods is open and exhibits the outline of an animal of the fabulous kind of a dragon, just as described in the said paper in the words of Gerard's "Herbal."

The question to be solved is, says the author of the paper, what was the fruit mentioned by Monardes, which contained so striking a verisimilitude to a dragon?

The figures of Monardes are so extremely crude, that they cannot afford any idea of the plant to which they belong. Still, they may be allowed to represent the pods of some species of the leguminous order.

Dragon's blood was certainly never an important article of commerce in Europe, and that from Carthage probably made its appearance in the market but very irregularly, and has completely disappeared long ago. It was, however, to be met with at that time; thus we find it plainly described by one of the most competent pharmacologists of the middle of our century. Theodore W. C. Martius (see Hanbury's "Science Papers," pp. 7 and 25), professor of materia medica in the Bavarian University of Erlangen (+1863), enumerates three varieties of dragon's blood in his "Grundriss der Pharmakognosie," Erlangen, 1842, p. 366 to 369, viz: that from Calamus, that from Dracæna (see "Pharmacographia," 2d edition, pp. 672 to 676), and, thirdly, that from Carthage, the source of which, according to Martius, is *Pterocarpus Draco*, L. This tree having been named by Linné, the knowledge of its product must have induced Linné to bestow on it the specific name of *Draco*. *Pterocarpus Draco*, indeed, is pointed out as the mother plant of the drug under notice as early as A. D. 1749, in the first edition of "Caroli Linnæi Materia Medica," Liber I., De Plantis, p. 184, No. 522. It is true that Java and India orientalis were erroneously stated by Linné to be the native countries of the tree.

The description of the resin, as given by Martius, is so accurate that we may feel quite sure that he had it before him. Whether he had actually the opportunity of ascertaining its botanical origin must remain unsettled. But Lindley already, in his "Flora Medica," 1838, p. 257, mentioned *Pterocarpus Draco* as yielding the red juice from the wounded stems; he also quoted a statement of Jacquin's to the effect that large quantities of that dragon's blood had once been exported from Carthage to Spain. When Jacquin paid a visit to Carthage, between 1754 and 1759, he found the commerce in dragon's blood had almost ceased. In his "Enumeratio systematica plantarum quas in sulis Caribæis vicinaque Americæ continente novas detexit," etc., Lugduni Bat. 1760, t. 183, N. I. Von Jacquin figured the tree under the name of *Pterocarpus officinalis*, whereas, in Hayne's "Darstellung und Beschreibung der in der Arzneikunde gebräuchlichen Gewächse," t. IX., pl. 9, the name of *Pterocarpus Draco*, Hayne, was applied to the tree which is now known as *Pterocarpus suberosus*, DC.; it is a native of Guiana.

Guibourt was also acquainted with the dragon's

blood from the West Indian Islands, which he ("Histoire naturelle des Drogues simples," II., 1869, 139, and III., 346) attributed to Linné's *Pterocarpus Draco*; he says the resin was very rarely to be met with.

It would appear, therefore, that we may unhesitatingly regard that tree as the source of the dragon's blood discovered near Carthage by the Spanish invaders. Its corky indehiscent pod of nearly orbicular outline tolerably answers to the figures of Monardes, and the solitary, kidney-shaped seed, if duly shrivelled, may remind, in the eyes of a fantastic observer, of what he supposes to be a dragon.

In India, *Pterocarpus Marsupium*, Roxb., affords the exudation called kino, which is but little used now. It would be desirable to investigate the chemical composition of the dragon's blood of the *Pterocarpus Draco* and to examine whether it does or does not agree with the kino of the nearly allied species, *P. Marsupium*, of Malabar. On applying to Jamaica, the material for such an investigation would probably be obtainable. It would be desirable to know whether two trees so closely allied, like the two species of *Pterocarpus* just mentioned could yield products so widely different as are kino on the one side and true dragon's blood on the other. In the careful monograph of dragon's blood by Lojander, "Beiträge zur Kenntniss der Drachenbluter," Strassburg, 1887, the author only mentioned briefly the drug of *Pterocarpus Draco*, which he had not at his command.

We may anticipate that it rather belongs to the numerous class of kinos, the exudations of several species of eucalyptus, as well as of *Pterocarpus Marsupium* and other trees. Whether they are chemically identical or not remains to be studied.

### The Detection of Adulterants in Peru Balsam.

Hirschsohn reports in a recent issue of the *Pharmaceutische Zeitschrift für Russland* the results of an elaborate series of studies made by him as to the adulterants of Peru balsam and their detection.

He observes when the petroleum ether extract of a sample is shaken with an aqueous solution of copper acetate it will take on an intense bluish green color if rosin, turpentine, Canada balsam, rosin oil, or balsam copaiba be present, while a pale greenish coloration indicates the presence of storax, fixed oils or balsam tolu. From these and other facts noted Hirschsohn formulates the following:

(1) When mixed with half its volume of calcium hydrate and warmed for half an hour on the water bath the balsam should not yield a solid mass.

(2) When one volume of balsam is mixed with four volumes of 80 per cent. acetic acid the resulting solution should be opalescent or only slightly cloudy and no oil drops should separate out within two hours.

(3) The petroleum ether extract of the balsam should not show green or bluish-green coloration when agitated with an aqueous solution of copper acetate (1 to 1,000).

(4) When hydrochloric acid of 1.19 specific gravity is poured over the residue left on evaporating the petroleum ether extract there should not be any color developed.

The above suffice to prove the presence or absence of adulteration; to determine the character of the adulterant the following schedule is given: The petroleum extract means the clear solution obtained by shaking one part of balsam of Peru with five parts of petroleum ether and either decanting or filtering.

(A) Shake the petroleum extract well with half its volume of water; allow to stand, add caustic

potassa solution and potassium iodide and warm. If the mixture is at first cloudy, an aqueous layer separates out and crystals of iodoform form the balsam contains.....*Alcohol*.

(a) Treat one part of the separated petroleum solution with an equal volume of an aqueous solution of copper acetate (1 to 1,000) and shake well.

(b) The petroleum extract turns an intense bluish green (presence of rosin, turpentine, Canada balsam, balsam copaiba, or rosin oil).

(c) Mix one volume of the petroleum extract with half a volume of brom-chloroform (1 to 20); violet red coloration. The balsam forms a solid mass with calcium hydrate, and with 80 per cent. acetic acid yields a cloudy solution, from which, after a few hours, drops of oil separate out. The balsam contains.....*Balsam copaiba*.

(c) The brom-chloroform (1 to 20) gives no color.

(d) The balsam yields with calcium hydrate a soft mass, with 80 per cent. acetic acid a turbid solution from which oil drops soon separate out; the residue of the evaporated petroleum extract is soluble in 90 per cent. alcohol. The balsam contains.....*Rosin oil*.

(d) The balsam forms a solid mass with calcium hydrate, and a turbid solution with acetic acid from which after several hours no oil drops separate. A filtered solution of the balsam in absolute ether (1 to 4) yields a turbid mixture with 5 to 10 volumes of 90 per cent. alcohol. The residue of the evaporated petroleum extract does not yield a clear solution in 90 per cent. alcohol. The balsam contains.....*Canada balsam*.

(d) A solid mass is formed with calcium hydrate and a slightly cloudy solution with 80 per cent. acetic acid. The (absolute) ether solution of the balsam remains clear on the addition of alcohol and the petroleum extract residue yields a clear solution with 90 per cent. alcohol. The balsam contains.....*Rosin or turpentine*.

(b) The petroleum extract is colored a pale green or not at all (presence of storax, fixed oils, tolu balsam, benzoin or gurgun balsam).

(c) Brom-chloroform (1 to 20) yields a violet blue mixture. The petroleum extract residue turns pink when hydrochloric acid (sp. gr. 1.19) or hydrobromic acid (sp. gr. 1.4) or phosphoric acid (sp. gr. 1.7) is poured over it. Calcium hydrate forms with the balsam a soft mass, and acetic acid a cloudy mixture from which after several hours oil drops separate out. The balsam contains.....*Gurgun balsam*.

(c) Brom-chloroform (1 to 20) gives no color.

(d) The balsam gives with calcium hydrate a soft mass, acetic acid yields a cloudy mixture and oil drops soon separate out.

(e) The residue from the evaporation of the petroleum extract is soluble in 90 per cent. alcohol. The balsam contains.....*Castor oil*.

(e) The residue is not soluble in 90 per cent. alcohol, oil drops separate out. The balsam contains.....*Other fixed oil*.

(d) The balsam solidifies with calcium hydrate, acetic acid forms an opalescent or slightly cloudy solution.

(e) The petroleum extract is of a clear greenish color and turns brown on mixing with sulphuretted hydrogen water. The petroleum extract residue turns bluish green on being treated with nitric acid (sp. gr. 1.38). The balsam contains.....*Storax*.

(e) The petroleum extract is scarcely greenish, and turns slightly brownish with sulphuretted

hydrogen water. The residue of evaporation is not colored by nitric acid. The balsam contains.....*Balsam tolu*.

(e) The petroleum ether is colorless and shows no decided change with sulphuretted hydrogen water. The residue of evaporation, is not colored by nitric acid. The balsam contains.....*Benzoin*.

**Headine**, a secret preparation, was found to consist of 68.73 per cent. acetanilid and 31.57 per cent. sodium bicarbonate. Dr. A. Schneider, *Pharm. Centralhalle*, 1893, 364.

**Cause of Variation in Estimations of Caffeine.**—A. Hilger has found (*Pharm. Zeit.*) that both kola and cacao contain a glucoside and a diastatic ferment. In the kola nut this glucoside splits up, either under the influence of the ferment in the presence of heat or under the action of 10 to 20 per cent. sulphuric acid into caffeine, dextrose, and kola red. The glucoside from the cacao yields theobromin, dextrose and cacao red. From this it will be seen that to obtain a uniform yield of caffeine it is essential that the glucoside be completely split up before the estimation is made.

**Permanent Syrup of Iodide of Iron.**—Camille Levy (*Jour. der Pharm. Els.-Loth.*) recommends the addition of hypophosphoric acid ( $H_3PO_4$ ) which prevents oxidation and is not objectionable from a therapeutic point of view. He proposes the following: Mix 16.5 grammes of iodine with 720 grammes of distilled water, add, in divided portions, 9.1 grammes of powdered iron, filter the green solution into a flask containing 8 grammes of a 10 per cent. solution of hypophosphoric acid. This yields a 20 per cent. solution of  $FeI_2$ . He proposes to add 25 grammes of this solution to 75 grammes of raffinate (a liqueur).

**Vasogen or Oxygenated Mineral Oil.**—Though formerly considered as neutral and non-oxidizable, later studies have shown that the mineral oils do contain acids and may oxidize. Dr. Max Dahmen reviews the literature and the theory of the matter at some length in the *Pharmaceutische Zeitung* as an introduction to "vasogen" an "oxygenated not oxidized" mineral oil. Vasogen forms a permanent emulsion with water and is a solvent for a variety of medicaments. It is recommended as an adjuvant and vehicle both for internal and external medication; more particularly the latter. When applied undiluted to the mucous membrane vasogen has a slightly caustic action which is not the case when mixed with water.

**Oleocreasote** is a straw-yellow oily liquid with a slight odor of creasote and does not "bite" the tongue. Camille Levy gives the following directions for its preparation (*Jour. der Pharm. Els.-Loth.*): Put into a flask 74.4 grammes of pure creasote and 169.2 grammes of pure colorless oleic acid, mix and place in an oil bath. To the mixture add in divided portions 27.5 grammes of phosphorus trichloride. When the reaction is complete gradually raise the oil-bath to 135° C. and maintain at this temperature for some time. Allow to cool carefully, decant the oleocreasote from the phosphoric acid, wash with distilled water in a large separating funnel, allow to stand until separated, draw off the water and repeat until the water no longer has an acid reaction or affects silver nitrate. The excess of oleic acid is gotten rid of by saponifying with soda solution and washing out the resulting soap. The last traces of water are removed by treatment with dried sodium sulphate. The oleocreasote remaining in the sodium sulphate may be recovered by treating the mass with ether and distilling off the ether.

## News and Notes.

### Errors in the New Pharmacopœia.

Dr. J. F. Golding, of the Brooklyn College of Pharmacy, calls our attention to a few minor errors in the Pharmacopœia.

On page 295 under "Pepsinum," line 12 from below, the statement is made that "The resulting 100 Cc. of liquid will contain 0.2 Cc. (0.21 Gm.) of absolute hydrochloric acid." This should read "The resulting 100 Cc. of liquid will contain 2 Cc. of dilute hydrochloric acid, representing 0.21 Gm. of absolute hydrochloric acid."

On page 3, last line, the word "Aromaticus" should read "Compositus."

In the list of articles dismissed from the Pharmacopœia, Tinctura Ferri Acetatis is not included.

### American Pharmacy Defended.

A recent issue of the London *Chemist and Druggist* contained some critical references to the condition of American pharmacy, which criticisms have called forth the following rejoinder from the pen of S. P. Smith, of Hartwell, Ga., which was published in a later issue of the *Chemist and Druggist*.

The article (on American Pharmacy) does us an injustice, though it would probably have fitted the situation as it stood a quarter of a century ago. Our pharmacists, as a rule, are men of education, and not "message-boys and soda-fountain attendants" who have obtained certificates and been licensed on "account of favoritism." In this country "every tub must stand on its own bottom." This applies especially to druggists, for, if they are not competent men, a wide-awake public will soon discover it, and give them a wide berth, because they are not willing to place their lives in the hands of persons whom they know to be incompetent. Consequently, the druggist who is unfitted for the business soon finds it unprofitable, and gives it up for other lines.

In another place you say some of our men are licensed because they are good salesmen. To show you the error of that our prescription-clerks are seldom, except in very small towns, allowed to act as salesmen, the two lines of work being kept distinctly separate.

Again, as to our State Boards of Pharmacy, I cannot see how you get the idea that they are composed of "easy-going business men, without special education, who happen to have a political pull." The boards have absolutely no political significance. The examiners are appointed by the Governor of each State, solely on the recommendation of the pharmaceutical association, and it is the object of each Board to put forward its most thoroughly educated men. I do not know of a single instance of an examiner being, as you say, opposed to education or scientific progress. It is true we hold that no man, let him

have all the pharmaceutical education possible to obtain, is fitted to be a druggist until he has had the practical experience necessary to make him familiar with the mixing and compounding of drugs.

Three or four of the States have practically no pharmacy laws; but they are very thinly settled, and are far behind their sister States, in more things than the drug business. It has always been a rule in any State having no pharmacy law that, when the law was passed, all those engaged in the business, competent or incompetent, were allowed to continue. But it is certainly safe to say that, since then, those admitted to the profession have been well qualified to follow it.

You must remember that we are, comparatively speaking, young in the practice of pharmacy as a profession. Before our laws were enacted regulating the sale of drugs, any man, no matter how ignorant, could set up shop without being molested by the law.

It is only a matter of a few years when the class of educated druggist will constitute the great majority, if not the whole fraternity, in America.

In another place you make mention of our druggist, as a class, not being able to read or write a Latin prescription. That is a very great mistake. Take them as a whole, and not one out of ten will fail. Even if that were true, the day is close at hand when Latin prescriptions will be a back number. The physicians are fast discarding Latin for English in their prescriptions, and I think the English is by far the more practical.

The training of the pharmacist of America has the one purpose in view—that of perfecting him in the skill and knowledge necessary to the accurate and reliable compounding of the physician's prescription.

The best dispenser is he who, other things being equal, has the most thorough knowledge of chemistry, pharmacy, botany, materia medica, etc.

But he must, to make a good druggist, have special ability for prescription work, otherwise his theoretical knowledge avails him nothing.

Theory without practicability is barren, although the two, theoretical and practical pharmacy, are inseparably connected. It is with the latter that the druggist of today has most to deal.

You acknowledge that American pharmacists do good work, and that our Pharmacopœia reaches the high-water mark, but you give part of the credit for it to a European education. If that is true, why do some of our eminent men in pharmacy go to Europe, and after seeing their methods, etc., come back and stick to our own methods? These very men say that America, with the vast strides she is making, will in a few years be at the head of the world of pharmacy.

The compilers of our Pharmacopœias are men who were chiefly educated at

home, your article to the contrary notwithstanding.

Why is it that English druggists, except in some instances, cannot readily get positions in the United States? It is not for lack of ability, but it is because they work too slow.

I have seen them working side by side, the American usually doing twice as much work in the same length of time as the Englishman.

What avails it for a man to have special knowledge of pharmacy, if he has not the *vim* to make it felt? What we want is quick as well as accurate work. You are, in my opinion, again mistaken when you say that the drug-trade of the United States is at present much overcrowded. We pay to our men at least double the salary that English druggists do. First-class druggists readily command from \$1,500 to \$2,000 per year, and the large manufacturers pay their men even more than that.

### Chicago and its Visitors.

We hear that S. M. Burroughs, head of the house of Burroughs, Wellcome & Co., manufacturing pharmacists, Snow Hill, London, who has been for some time in Chicago attending the Pharmaceutical, Peace, Single Tax and Economic Congresses, has been sadly misunderstood by the Chicago newspapers which have represented him as a theosophist and a socialist. Writing to us with the object of correcting this erroneous impression he states, among other things, that he has no wish to steal other people's thunder; and is not desirous of being thought either a socialist or theosophist, as he is neither. Chicago editors will please take notice.

### Soot as a Disinfectant.

Soot now is added to the already lengthy existing list of substances which act as disinfectants. Charcoal has long been recognized as possessing purifying qualities, and soot which is a like element in a different form, has a great power of absorbing foul gases and clearing the surrounding atmosphere. It certainly is an economical and easily obtained disinfectant, and if freely sprinkled about acts in a quick and effective manner.

### Maine Matters.

The Deering Drug Co., of Portland, are erecting a new building at Morrill's Corner.

Unknown persons entered Parkhurst & Murnae's drug store, of Biddeford, lately and made off with about \$15 in money and several boxes of cigars.

Charles M. Brown, formerly an employee of D. C. Adams & Co., of Waterville, has entered the employ of Joseph Young at his new store on the East Side in Augusta.

The marriage of Judson E. M. Hiler, a well-known drug clerk of Brockport, and Miss Dora Waterbury has been announced.

Augustus G. Schlotterbeck, of Schlotterbeck & Foss, of Portland, has purchased the house formerly occupied by Locke and will have alterations made to fit the same as a laboratory.

Asa Warren, of Portland, has completed his drug store; it is fitted with every convenience known to a well equipped prescription department, and Mr. Warren has been highly complimented.

The Pasteur Drug Co. has been organized at Portland for the purpose of dealing in medicines, chemicals, drugs and toilet articles. President, Samuel C. Thayer, of Boston; treasurer, H. C. Williams.

The Washington Park Medical Co. has been organized at Portland for the purpose of manufacturing and dealing in patent medicines with \$100,000 capital stock. President, George F. Gould of Portland; treasurer, George H. Priest, of Sterling, Mass.

### New England News.

George B. Hitt has purchased E. C. Thorn's store at Brattleboro, Vt.

John L. Beaudry, druggist, of Manchester, N. H., has sold his store to Dr. Letourneat, of Laconia, N. H.

The David F. Baxter store, of Brookline, Mass., was fitted by Mr. Whipple and is the most modern store in that place.

E. H. Proctor & Co., late proprietors of a drug store in Laconia, N. H., have bought the Bartlett drug store in Tilton, N. H.

The drug store owned by Knowlton Bros. & Green, of Wampole, N. H., has changed hands. The new firm is Knowlton & Varney.

Miss Ella G. Nash of Yonkers, a graduate of the Massachusetts College of Pharmacy, has passed a State Board examination and been awarded a druggist's certificate.

W. B. McDonald, formerly with Johnson & Johnson, of New York, has started business for himself in Ottawa, Canada. He is also agent for W. A. Dyer & Co., Montreal.

### Massachusetts.

C. C. Hearn is about to open a first-class drug store in Quincy.

Hovey's drug store in Jenkins' Building, Whitman, was opened recently.

H. G. Starr, of Westbrook, will open a drug store at Old Orchard this season.

Frederick Murry and Miss Annie Connors, of Pittsfield, were recently married.

Smith, Beauregard & Co. have opened their new drug store at Sargent Square, Haverhill.

Thomas Godfrey, formerly of Colburn & Graves, anticipates opening a drug store in Northampton.

J. J. Murphy will open a branch drug store in the new Casey & Bacon Block at Morningside, Mass.

A. C. Brooks, of Warren, Mass., has bought an interest in the Import Drug Company, of Boston.

The petition for the release of T. H. Gould, of Attleboro, the druggist, has been forwarded to Governor Russell.

James S. Barry, druggist, Lynn, has recently put in a new soda fountain that is attracting considerable attention.

Samuel H. Blodgett, of Webster's drug store of Springfield, has gone to spend his vacation in the Berkshire hills.

There is a report that the Greenfield Chemical Co., of Greenfield, is to be made a corporation with a capital of \$10,000.

W. H. Ashman & Co., of Shelburne Falls, have dissolved partnership and W. H. Ashman will continue the business.

The pharmacy on Main street, Brockton, has changed hands and will open shortly under the management of E. Frank Swift.

William Kinlock, the genial assistant at Green's popular drug store, Beverly, Mass., has gone to his home for a few days' visit.

The stock of drugs in the store owned by the Worcester Drug Co., Worcester, was sold recently by order of the mortgagees, Flagg Bros.

J. G. Kilburn, of Newtonville, has sold his drug store there to E. F. Partridge. Mr. Kilburn has accepted a temporary position in Needham.

Frank E. Gaylord, formerly with Herbert Buckley, S. Boston, has bought the pharmacy formerly conducted by S. A. D. Sheppard, of S. Boston.

W. H. Hills, proprietor of the drug store at Chelmsford Centre, Mass., has been appointed postmaster of Lowell, S. W. Parkhurst having sent in his resignation.

Rumor has it that T. E. Murphy, formerly clerk for Chas. W. Perry, of Natick, is going to open a drug store in the corner at Odd Fellows' block in that place.

Edward Dillon, J. Bernard, and Thomas Noonan, of Lawrence, were arraigned at the police court for keeping drugs for sale without being-registered pharmacists.

Hugh R. Gray, of Buckport, Me., a pharmacist formerly in the employ of Frank H. Grader, has given up his position to assume the management of the Rexford Pharmacy, Boston.

The Melrose selectmen have granted liquor licenses to Larabee & Stearns, Cross Bros., Ware & Robbins, these being almost the first time in a decade that such licenses have been granted in the town.

The store vacated by the Jennison Plumbing Company, of Fitchburg, was opened as a drug store, Sept. 1, with Charles D. O'Connor, one of Col. H. G. Greene's former clerks, proprietor.

G. Leslie Hoyt's apothecary store at the corner of Wadsworth avenue and Moody street, Waltham, is greatly appreciated by the residents of that town, and he is deserving of the splendid patronage that is given him.

### Connecticut.

Merriman Brothers' drug store at Bristol has been re-ceiled with wood and varnished. It presents an attractive appearance.

Ollie Ives, formerly with Ed Merriman, druggist, of Bristol, has entered the employ of William Lowry, of East Hartford.

A. A. McCullum has decided to keep the drug store on the corner of Main and Park streets, Hartford, in its present location.

Joseph P. Lowry, of Sag Harbor, formerly a drug clerk in the employ of Nichols, Harris & Co., and Miss Lidia Wheeler were married recently.

Alvin W. Comstock, well known as former night clerk at Goodwin's drug store, Hartford, has accepted the position of stenographer to Superintendent A. P. Day at Pope's.

The Union Street Pharmacy, recently opened by John Hickey in his building at the corner of Union and Jackson streets, Willimantic, is a most attractive and well fitted up business place.

G. F. Mott, the popular salesman for McClure, Walker & Gibson, druggists, is drowning angle worms in the Kaaterskill Mountains. During his absence the drug trade is being attended by a no less luminous character in the personage of O. A. Tolle.

### Pennsylvania.

R. W. Heintzleman, a druggist of Pottsville, and Miss Sue Kaufman were recently married.

It is rumored on the Hill that Stuckey's pharmacy, Fulton street, Pittsburgh, has changed hands.

Walter E. Bevens, of E. Norwalk, has sold his drug business to Pemberton Brittin, of Newton, N. J.

The drug store of Mrs. F. A. Gingrich, of Reading, has been entirely remodeled and presents a fine appearance.

Robert T. Marshall, of the firm of Marshall & Bro., Philadelphia, has sold his entire interest in the business to Donaldson Marshall.

The work of remodeling the interior of the West Side Pharmacy, Bethlehem, by the new proprietor G. F. Metzger, pharmacist, is at last completed.

Dr. E. B. Potter, late clerk for S. M. Gillespie, has bought the McKean drug store at Edinboro and moved the goods into the Peck & Sons' building.

Gilpin H. Hickman formerly in the employ of W. T. Hoch, of Lancaster, has accepted a similar position in Dr. E. B. Herr's drug store in Lancaster.

The roof of Dr. Howard Dager's residence and drug store, southeast corner of Twenty-seventh street and Lehigh avenue, Philadelphia, was blown off recently.

George C. Sanborn, clerk of George Nichols, of Northfield, has purchased an interest in the business. The new firm will be known as Nichols & Sanborn.

S. S. Jones, the druggist, of Wilkesbarre, has purchased a farm seven miles west of Nanticoke, with a beautiful body of water on it, 3½ miles in circumference, called Lake Silverworth.

The West Side Pharmacy at Kingston was opened this week in the building adjoining Edwards & Co.'s store. It is under the management of W. H. Breisch, a graduate of the Philadelphia College of Pharmacy.

T. Ray Wirsing, a graduate of the Pittsburgh College of Pharmacy, has passed a successful examination by the State board for a manager's certificate of pharmacy. He is connected with Greer's drug store, Greensburg.

### Southern Siftings.

Dr. J. A. Allis, of Plainfield, has located at Lackawaxen, Pa., where he also owns a drug store.

Messrs. Cooper & Knowles, of Fort White, Fla., is another growing and pretentious firm of druggists.

Thos. Taylor, of Louisville, Ky., is among the pharmacists who have already visited the World's Fair at Chicago.

The new drug store of Sol Cronheim, formerly of the firm of Benjamin & Cronheim, Atlanta, Ga., is a thing of beauty.

Bedford & Fisher, druggists, of Fort Worth, Tex., have dissolved partnership. W. J. Fisher now owns the entire interest.

Asa Devault, formerly clerk at Ong's drug store, Martin's Ferry, W. Va., is a recent graduate of the Illinois School of Pharmacy.

A water valve having been partly left open in the warehouse of Burrough Bros., Baltimore, caused a damage of \$300 drugs and chemicals.

Dr. Forsythe, of Upland, has moved to Wilmington, Del., and entered into partnership in the drug business in connection with the practice of his profession.

Erdman Hoffman and J. Harvey Spruance, of Wilmington, Del., have been appointed by Governor Reynolds as members of the State Board of Pharmacy.

Dr. James Richardson, of St. George's, has purchased the pharmacy of Dr. S. P. Manship, at Tenth and Pine streets, Wilmington, Del. He has gone to the World's Fair.

Pharmacist Henry Meyer, of Greenville, Ky., who has had thirteen years' experience in the drug business, will hereafter be found behind the counter of Dr. Wiley Rogers at Louisville.

The Elkin-Watson Drug Co., which has occupied the store in the old Collier Building, Atlanta, Ga., will in a short time move to the corner at present occupied by Miles & Stiff.

Wm. Hague, of Young's East Wheeling pharmacy, East Wheeling, W. Va., has gone to Barnesville for an outing. Geo. H. Krauskoff, of the city, is filling his place at the drug store.

C. M. Grieve has opened up his new store in the McCallie block, at Sixth and Market streets, Chattanooga, Tenn., and now has one of the handsomest stores in that section of the city.

Dr. J. S. Baker having purchased an interest in the Bedford City Drug Co., Bedford City, Va., will retire from the practice of medicine on August 31 to go into the drug business on September 1.

Dr. G. A. Dweely, formerly of Ocala, has opened an attractive pharmacy at the corner of Cass and Franklin streets, Tampa, Fla., and placed it in charge of his son A. P. Dweely. The store is fitted up in the most modern fashion.

Geo. W. Gaskill, a graduate of the Department of Pharmacy of the University of North Carolina, has purchased the stock and fixtures of the New Berne (N. C.) Drug Co. and will carry on the drug business at their old stand.

Nathan C. Lackland, who has been in the employ of J. S. Beetem, at the corner of Seventh and Market streets, Wilmington, Del., has purchased the drug store of

Everett Stevens, corner of Tenth and Adams streets, that city.

Wm. H. Pierson, Jr., the young drug clerk, of Wilmington, Del., who had his eyes injured by an explosion in compounding a prescription on the 3d ult., is reported to be doing well and no fears are entertained of permanent injury resulting from the accident.

Elmer Outten, druggist, of Lewes, Del., has contracted with John Barr for a new drug store on his lot on Second street. The store will be 20 x 50 feet with annex. The building will be completed by the last of October. It will be a two-story frame provided with necessary modern fixtures.

### Random Notes.

The drug stock of E. W. Clancey, the Beatrice, Neb., druggist who recently failed, will be sold at sheriff's auction this month.

Harry Woodsworth, formerly with the C. D. Smith Drug Co., is now traveling for P. D. & Co. in Nebraska and Dakota.

Dr. Charles E. Bowers, a graduate in pharmacy, has opened a drug store at the corner of Sixth and Walnut streets, Columbia, Pa.

Joseph Higgins has rented premises in Springfield, Ohio, next to McCullough's Ark, and will open up a drug store in a few weeks.

A. H. Scope, a Denver, Col., druggist, was shot and fatally wounded on Wednesday morning by a burglar who was trying to rob his store.

About September 1, Messrs. Armstrong & Johnson, both practical chemists and druggists, opened a wholesale physician's supply house in Terre Haute, Ind.

The water pipe from the roof of Griffith's drug store at Pawnee City, Neb., became clogged during a heavy rainstorm recently and damaged \$231 worth of wall paper. The adjoining drug store of Rogers & Colwell suffered a small loss in a similar manner.

Joseph Hoeveler, Jr., the popular and enterprising pharmacist of 241 Central avenue, Cincinnati, O., has received his samples for the Fall trade of a very handsome line of E. L. Leightener & Co.'s well-known perfumes. During his absence on the "road" his pharmacy will be in charge of E. A. Pohlmeier, formerly head clerk with Otto Faxes.

### New York City Items.

T. R. L. Loud is making a western tour for Merck & Co. which will embrace St. Louis and Chicago.

Harry French, of the Smith, Kline & French Co., Philadelphia, and Geo. Kaltetey, of the San Antonio Drug Co., of San Antonio, Texas, were in the city last week attending to supplies for the Fall trade.

T. P. A. Kelly, who graduated lately from the Brooklyn College of Pharmacy, and is well known as an enthusiastic member of the New York Society of Apothecaries, was married at Chicago on the 14th inst., to Miss Alice T. King.

Among the passengers for Europe on the Lucania on Saturday the 16th was Alex. McKenzie, of Bradford, England, who is interested on the wholesale drug business there. Mr. McKenzie has been in attendance on the exposition at Chicago.

We had a pleasant call the other day from Henry R. Cheers, of Plymouth, N. C., formerly president of the Pharmaceutical Association of his native State. Mr. Cheers took an active part in the proceedings of the A. P. A. during the Chicago meeting and was chiefly instrumental in inducing the association to choose Asheville, N. C., for the next meeting place.

Sharp & Dohme have decided that in order to meet the rapidly growing demands of their trade, both foreign and domestic, it will be necessary for them to remove their principal offices from Baltimore to this city, a step which will be taken on October 1. Ernest Stoffregen, the secretary and treasurer of the company, will assume personal charge of the offices at 41 John street, and will therefore take up his residence in this city. Robert R. Martin, who has been looking after the New York interests of the firm, sailed yesterday for London where he will introduce their specialties, such as Ergotole and Webber's pepsin. Mr. Martin will probably remain abroad for a few weeks only just now, but while there will perfect arrangements to take up his residence in London permanently.

### Recent Drug Fires

Allen Drug House, Ottawa, Ill. Loss \$12,000—J. C. Curnutt & Co., St. Joseph, Mo.—C. H. Oughton's drug store, Chicago, Ill. Damage \$3,000—Rousseau & Co., Woonsocket, R. I. Loss \$500—J. B. Stone, Gloversville, N. Y.—L. H. Harris and A. C. Henderson Drug Company, Pittsburgh, Pa. Loss \$100,000; fully insured—C. E. Hankenson, Minneapolis, Minn.—L. H. Havus, Pittsburgh, Pa.—E. H. Luce's store, Pueblo, Col. Loss \$1,000—W. Spiker, Columbus, O. Loss \$300—H. E. Gunn, Worcester, Mass.—The Market Pharmacy, Salt Lake City, Utah. Loss \$1,000; fully insured.—J. D. Gould's store, Indianapolis, Ind.—Hooff's store, Huntington, W. Va.—Cottingham & Co., Snow Hill, Md.—Wholesale Drug Company, Chattanooga, Tenn. Damage \$85,000; insurance \$20,000—John L. Thompson, Sons & Company's wholesale drug house, Troy, N. Y. Loss \$100—Houghton's store, Chicago, Ill. Damage \$3,000—McCague's store, Princeton, Minn.—Eden's store, Red Key, Ind. Loss \$8,000; fully insured.—Metzgar's West Side Pharmacy, Bethlehem, Pa.—Lyon's store, Milford Centre, Ohio—R. C. McGahey, Nashville, Tenn. Damage \$500; fully insured.—J. E. Plummer's store at Tamora, Neb. Loss \$1,700—T. S. Arnold, Watseka, Ill. Loss \$5,500—Pecan Valley Drug Co., Brownwood, Tex.—J. A. Folsom & Co., Boston, Mass. Loss \$20,000—O. Snyder's store at Denver, Col. Loss \$3,000—Phillips' Drug Company at Nashville, Tenn.—W. Longstaff, Jersey City, N. J.—Geo. Nixon's store at Richmond, Va.—Dr. Peabody's store at Luckey. Loss \$2,000; partly insured—Merrimac Chemical Co. at N. Woburn, Mass. Loss \$200,000—Spreth Brothers at Long Island City. Loss \$2,000—J. L. Thompson's Sons & Co., at Troy, N. Y.—Wilkinson & Co., Keokuk, Ia.—Tschliffley & Evans, damage \$500—D. D. Frothingham, at Waltham, Mass. Loss \$2,000—H. C. Garrett's store at Greenville, Miss. Loss \$2,000—E. E. Renfrow, Brownwood, Tex.

## With the Advertisers.

### Unanswerable Demonstration.

We have received and read with a degree of interest and surprise a publication recently published by the Humphreys' Medicine Co., New York. It contains nearly a thousand testimonials of the efficacy of Humphreys' Specifics.

These testimonials are the unsolicited offerings of those who have experienced and witnessed the wonderful curative effects of these Specifics. There are some three hundred from publishers and editors, one hundred from dealers, and others from every grade of society, and all with one accord tell the same story, the wonderful curative effects of Humphreys' Specifics.

Surely one thing is settled beyond controversy.—Humphreys' Specifics do cure. So say the people. Send to the company for a copy and read "What Dealers Say."

### Creasote Carbonate (Creasotal).

Creasote carbonate contains over 90 per cent. of the purest beechwood creasote in chemical combination with carbonic acid. It is a clear, absolutely neutral, oily liquid, free from the unpleasant odor and burning taste of creasote.

It is insoluble in water, but soluble in four to five parts of cod liver oil or olive oil. Its action is not caustic and irritating to the mucous membrane of the digestive organs, like that of creasote, as it has no effect upon the same.

Creasote carbonate, compared with creasote, is non-poisonous to such a degree that it can be dispensed as a pure undiluted substance by the teaspoonful, and thus it will perfectly agree with the most sensitive patients.

According to Prof. Sommerbrodt, the more creasote one can tolerate, the better its effect. Since creasote can be borne better in no other form than that of creasote carbonate, this is the ideal creasote preparation for phthisical patients.

One of the very first effects of this drug is the return of an increasing appetite, and a consequent gain in strength; furthermore the cough diminishes perceptibly in frequency and at last a healing process in the lungs is observed. The weight of the patient increases in proportion, sometimes at an enormous rate.

### Esterbrook Pens.

Among men of letters, journalists, doctors, druggists and others who make much use of the pen, the "Esterbrook" is by all odds the favorite. All who wish to preserve the individuality of their handwriting should stick to one style of pen. The Esterbrook Company have pens of all kinds to suit all kinds of writers.

The "Falcon" is, perhaps, the most widely used pen of the numerous varieties. It is a good substitute for the quill and possesses many of the fine flexible properties of the latter. Druggists will have no difficulty in procuring a sample box of

assorted pens if they will address the Esterbrook Pen Co., at 26 John street, New York, mentioning this paper.

### Lobster and Papoid.

There is a use of papoid, that, though not strictly physiological, will still be of value as long as human nature continues as degenerate as at present. Men will disregard warnings and attend lodge suppers, wine parties, etc., where all sorts of rich foods are taken. Now, papoid appears especially powerful as a digestant of just such food; croquettes, salads, game, are powerfully acted upon by this agent. Especially is this the case with that intractable delicacy, lobster. Papoid, it is said, digests lobster in any form with remarkable rapidity. Even when lobster and milk have been taken together, and the result is a hard compact mass of casein, papoid will disintegrate it in a very short time. To these good livers, therefore, we can allow an indulgence in their favorite food, if they slip a few tablets of papoid into the vest pocket before setting out for the "lodge."

### Gelatin Capsules.

One of the houses of established reputation in the manufacture of empty and filled gelatin capsules is Dundas Dick & Co., White street, New York. Wherever their goods have been entered in competition with the goods of other makers, the superiority of Dundas Dick & Co.'s manufacture has been conspicuous. In evidence of this they show medals awarded by several expositions of national importance. Among the specialties of the firm are: Docuta sandalwood capsules, Macqueen's matico ointment, Macqueen's matico injection, thermaline, menthol cones (mentholene and mentholette). Dundas Dick & Co., claim that they were the originators of the popular menthol cones which are said to be the only absolutely pure menthol cones sold. A complete list of the different specialties of the firm of Dundas Dick & Co. is contained in their special price list, a copy of which will be mailed free to any druggist mentioning the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD.

### Illuminated Signs.

The prismatic bulb crowning the immense column of the Electricity Building at the World's Fair was the work of F. McLewee & Son, 25 Waverly place, New York City. The bulb is 10 feet high and the largest piece of work of its kind ever attempted, and is composed of 40,000 crystal prisms which took eight men five weeks to place in position.

F. McLewee & Son make a specialty of the manufacture of illuminated mortars for display by druggists. The McLewee copper illuminated mortar, lighted by gas, oil or electricity, is an ad-

vertising medium of the first class. It is made entirely of sheet copper, highly burnished and durably lacquered to protect the metal from the effects of exposure during bad weather. The metal composing the body of the mortar is studded with convex glasses of ruby, crystal and emerald, which produces the effect of sparkling gems when the interior is lit up. Druggists should procure a catalogue of the different designs in illuminated signs and gas and electric fixtures.

The Crown Perfumery Company is showing an unusually fine assortment of perfumes and other holiday goods at their New York office, 160 Fifth avenue. Percy Magnus, who is in charge, has extended an invitation to the retail druggists of the city to call and inspect the display.

## Notes on Prices.

### Chicago Prices.

Referring to the general features of trade Morrison, Plummer & Co., importers and jobbers of drugs and manufacturing pharmacists, Chicago, Ill., remark in their September circular that the general features of trade are as noted in their previous circular. Orders, while fairly numerous, have been moderate in size, buyers preferring to exercise a wise caution in confining their purchases within the lines of safety. While changes in prices in the subjoined list are nearly all in the buyer's favor, the tone of the market is improving and greater activity is looked for in the near future. Commenting upon special features of the market, the fluctuations and advances are noted as follows: Acid, carbolic, of the lower grades, shows a further decline. Tartaric is also lower. Balsams, Fir, Canada, is easier at 38 @ 40c. lb. Peru, \$1.65 @ \$1.75 lb. Bismuth, Sub-Nitrate, \$2.10 @ \$2.20 lb. Camphor is again lower and weak. Chloral Hydrate; the decision of the customs appraisers, making this article dutiable at 50c. lb., has been sustained, hence no reduction in price can be looked for. Cocaine and other alcohols may be affected by this decision. Cream Tartar is slightly lower. Cubebs 35 @ 37c. lb. Gums, Aloes, Barbadoes, and Socotrine are quoted lower, as also Arabic, 1st and 2d pick. Oils, Essential, Bergamot (Sanderson's), Cassia, Croton, Cubebs, Lemon (Sanderson's), Peppermint, Sandalwood and Wormwood are all lower, while Pennyroyal, Rose and Tansy are higher. Heavy: The principal changes have been in Lard and Linseed. The former dropped for a day or two in the early part of the month to 55c. gallon for "Extra," but soon recovered and has fluctuated between 60c. and 67c. as to brand. Linseed declined to 45c. on the 10th ult., 43c. on the 24th, and 41c. on the 30th ult. for Raw. Opium gradually declined during the month and reached \$2.40 lb at its close but has reacted somewhat and is held to-day at \$2.50, with the prospect of a further rise; case lots being held at \$2.45 @ \$2.50 in New York.

easier at 60 @ 65c. Quinine, Foreign, in 100 oz. cans, is selling in this market at 18c., being 2c. oz. less than manufacturers' price. Roots: Senega, with the advent of the new crop, is lower. Saffron, American, has further declined to 35 @ 40c. lb. Seeds: Canary and Hemp, Recleaned, are quotable by the sack (220 lbs.) at 3c. lb. Mustard is in active demand at slightly lower figures. Silver Nitrate, P. W., we quote at \$3 lb. in 1 lb. bottles. Spices: Pepper is lower. Ginger, Jamaica, higher.

### Advance in Bromides.

Rosengarten & Sons, manufacturing chemists, Philadelphia, have issued a circular under date of September 15, in which they quote the different bromide salts as follows:

|                                     |             |
|-------------------------------------|-------------|
| Ammonium, bromide, bulk, by 50 lbs. | .45 per lb. |
| Potassium, " " " 100 "              | .36 per lb. |
| " " " " 50 "                        | .35 per lb. |
| Sodium " " " 50 "                   | .40 per lb. |

## Review of the Wholesale Market.

NEW YORK, September 20, 1893.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

No new features of special interest have developed in the general market since the issue of our last report. The uneasy and disturbed condition of business generally, owing to the delay in silver legislation, finds reflection in the drug market and buyers are not disposed to purchase beyond actual wants. The market is developing a firmer tone, however, and values on many of the leading staples have advanced. This is a natural consequence of the easier position of the money market, there being, with easier money, less necessity to realize. Opium and quinine continue to advance. The same may also be said of Balsam Fir, Canada, Coriander and Caraway seeds, Quicksilver, Bleached Shellac, Jalap, Menthol, Cassia Buds, and Bromides, all of which show an advance on previous quotations. Among the roots, Senega, Ipecac and Orris have declined.

### DRUGS.

ARNICA FLOWERS are taken moderately in jobbing quantities within the range of 10 @ 11½c., the outside figure being quoted close for fancy grades.

BALSAM, CANADA FIR, is maintained firmly at the recent advance, \$3 being now quoted as an inside price for quantities. The article is becoming scarce owing to lack of offerings from primary sources.

BALSAM COPAIBA is in active consuming demand and the tone of the market is firmer, though quotations are nominally unchanged. For Central American 30 @ 35c. is asked as to quantity and brand.

BALSAM PERU continues quiet with previous prices quoted steady.

BALSAM TOLU is held at 23 @ 25c. as to quantity and quality; jobbing sales.

BARKS.—Cascara Sagrada is attracting more attention and sales are reported of 7,500 lbs. at 6½c. The jobbing price is firm at our quotations. Soap has been offering at 4c. for cut and crushed, but the market is irregular and unsteady. Simaruba is getting scarce, and holders are now asking 32c.

CACAO BUTTER, Dutch, is in good supply and offering at 33½ @ 34½c. Among recent transactions are included sales of 8,000 lbs. and 2,000 lbs. at 33c.

CANTHARIDES continue quiet, inactive, and there is no change to report in quotations.

CASSIA BUDS are jobbing fairly at the recent advance to 18½c. and are well sustained at this figure.

CHAMOMILE FLOWERS, German, are in fair consumptive demand and we are reported sales of 1,000 lbs at 20c.

COD LIVER OIL, Norwegian is improving in demand, and a fair distributive movement is reported. Ordinary brands continue held at \$18.50 @ \$22. "Three Fish" has sold to the extent of 20 bbls. at \$25.

CUBEB BERRIES are dull with the market weak and unsettled owing to free offerings. For XX 25 @ 28c. is asked and for Ordinary 20c.

CUTTLE BONE, Trieste, continues quiet at nominally unchanged quotations.

ERGOT is momentarily neglected and the market is easier, holders quoting 35 @ 38c. for German, while goods of fair quality are offering in instances at 34c.

HERBS, SWEET, have been in demand during the week and we note small sales of Marjoram at 12 @ 15c.; Savory at 4c.; Thyme at 4c. and Sage at 5 @ 6½c. as to quality.

INSECT POWDER is without important inquiry, though prices continue on the previous basis.

LEAVES, Buchu, short, are in limited demand at 13 @ 16c. Coca, Truxillo, are weakening, and offers to sell have been made down to the point of 12c. Hyoscyamus is in fair jobbing demand, though no transactions of importance are reported. Sales are being made at 6½ @ 7c. Jaborandi is almost out of market. For the small quantity remaining 60c. is asked. Peppermint, German, are in light supply and firm at 65 @ 75c.

LYCOPodium upon spot is very scarce. 53 @ 55c. is asked for the quantity remaining. For new crop to arrive we are quoted 43c.

MENTHOL, Japanese, is held within the range of \$3.90 @ \$4.

MORPHINE is being taken more liberally by the trade, and though still obtainable at second hands at from 5 @ 10c. below manufacturers' prices, the outside offerings continue to diminish and manufacturers' prices are expected to shortly govern the market.

OPUM has continued in demand and the market is firmer in tone at the recent advance. The sales in the Constantinople market during the fortnight ending August 3, amounted, according to the *Chemist and Druggist*, to about 60 cases in all, of which 12 cases went to speculators at 11s. 4 d. f. o. b. for good Yerli qualities; 20 cases Talequale for U. S. account at 10s. 4 d. f. o. b. to complete forward sales (September delivery), and about 30 cases Holland Visite at 13s. 2 d. f. o. b.

Arrivals both in Constantinople and in Smyrna are about one-fifth of last years, viz., 323 and 353 cases respectively. According to later advices the receipts of new crop in the Smyrna market to the 1st inst. included only 438 cases, against 2,225 to corresponding period last year. The stock there on September 1, was 2,278 cases against 2,986 same time last year. In this market buyers' ideas do not rise above \$2.70 for round lots. For jobbing quantities the quotation stands at \$2.75 @ \$2.80 and a fair business is being transacted within the range. Powered is held at \$3.35 @ \$3.45.

QUININE is in good seasonable demand, though more of the transactions include

lots above jobbing proportions. Foreign brands upon regular terms are quoted 18½ @ 19½c. Upon a cash basis 18½c. is the lowest open quotation.

SAFFRON, American, continues to offer at 27 @ 28c. The stock appears to be well concentrated and an early advance may be looked for.

SUGAR OF MILK, domestic, is offering down to 11c. as to brand. The range stands 11 @ 14c.

TONKA AND VANILLA BEANS are quiet at unchanged quotations.

### DYESTUFFS.

CUTCH is momentarily neglected, though holders are not disposed to urge the distribution by granting further concessions. SM is held at 4½ @ 4¾c. as to quantity.

DIVI DIVI is in demand by dyers, and we note among recent sales 2,000 bags on p.t. Jobbing values remain \$50 @ \$60.

GAMBIER is in fair jobbing request, and the market is fairly well sustained at 4 @ 4½c. for jobbing lots. To arrive held at 3¾c., and forward shipment 3¾ @ 4c.

SUMAC, Sicily, continues in fair demand at the range of \$65 @ \$75 as to brand and quantity.

NUTGALLS, Blue Aleppo, are finding sale in a small way within the range of 13½ @ 15c.

TURMERIC and other lines are without important change.

### CHEMICALS.

ACETANILID is finding a steady consuming outlet at 38 @ 40c., but no large sales are to be noted.

ALUM continues in demand, with sales at \$1.75 for lump and \$1.85 for ground.

BLEACHING POWDER remains quiet, without, however, any quotable change in price, the range standing 2½ @ 2¾c. for English and 2.05c. for German.

BLUE VITRIOL is in fair jobbing demand with the current sales at the range of 3½ @ 3¾c.

BORAX is not given much attention at present, but prices continue to be maintained on the old level.

BRIMSTONE, crude seconds, continues extremely dull notwithstanding low current values. Best seconds to arrive are quoted \$17.50, while forward shipment is placed at \$16.75.

BROMINE SALTS have been advanced 2c. per lb., the quotations now standing at 35 @ 26c. for potassium in bulk, 43 @ 44c. in bottles; 43 @ 44c. for ammonium in bulk and 40 @ 41c. for sodium.

CARBOLIC ACID is in slightly better demand with sales of pound bottles at 20 @ 21c.

CHLORATE OF POTASH is toning up, the statistical position of the article being improved by recent liberal shipments. Round lots can yet be secured at 14½c., but the lowest open quotation is 14½ @ 15c.

CITRIC ACID is offering from second hand at 1 cent reduction on manufacturers' prices with fair business at the range say of 44½ @ 45c. as to quantity.

CREAM TARTAR continues dull, but prices have undergone no quotable change.

NITRATE OF SODA is passing into consumptive channels in fair quantities. From importers' hands \$1.70 @ \$1.75 is asked as to quantity.

OXALIC ACID continues to offer at 6½ @ 6¾c, but no great activity is observed.

QUICKSILVER has been advanced by the Rothschilds in London 2s.6 or say to £6. 10s., and the value here has appreciated to 52 @ 54c.

#### ESSENTIAL OILS.

ANISE is developing a firmer tone, \$1.37½ being generally regarded as an inside price for quantity lots. The current jobbing sales are at \$1.37½ @ \$1.40.

BERGAMOT is quiet, and the market is easy in tone, though the range of prices is unchanged.

CASSIA is firmer, though not quotably higher. We quote the range at 75 @ 80c.

CUBEB is dull, though there is seemingly no urgency to realize at a concession. Offerings continue to be made at \$2.25.

CLOVE continues quiet, though not quotably lower; small sales at 52½ @ 55c.

LEMON AND ORANGE remain quiet at nominally unchanged prices.

PENNYROYAL is in slightly easier position with offerings of French at \$1.20 @ \$1.25. Domestic is in fair jobbing demand at \$1.35.

PATCHOULY is offering at a trifle lower, being now quoted \$4.50 @ \$5.

PEPPERMINT has ruled quiet during the week. H G H has been inquired for to some extent, but chiefly for forward delivery. Bulk Western is obtainable down to

\$2.20, but for Wayne County \$2.40 is generally asked. H G H continues to offer \$2.50 @ \$2.55 spot.

SASSAFRAS is in fair demand at 35 @ 38c., the inside price for crude.

TANSY promises to show an early appreciation, owing to poor crop prospects.

WINTERGREEN is showing a slightly easier feeling, with, in some instances, \$1.60 quoted as acceptable.

WORMWOOD will probably be sold at an advance this year, crop reports from Wayne County advising a falling off of about one-third, as compared with the corresponding crop of last year.

#### GUMS.

ALOES continue dull, without, however, any quotable change in prices.

ARABIC is experiencing a moderate inquiry at the lower range. The quotations have been revised as follows: 1st picked, 47½ @ 52½c.; 2d, 34 @ 36c.; 3d, 22 @ 23c.; 4th, 17 @ 18c.; 5th, 13 @ 14c.; and sorts, 11 @ 12½c.

CAMPHOR continues very quiet; prices are somewhat irregular and unsettled owing to competition between manufacturers and outside holders. Manufacturers' quotations remain 46 @ 47c. for barrels and cases; but these figures are shaded by outside holders to 45 @ 46c.

TRAGACANTH, Turkey, is less firm, being offered at about 48 @ 75c. as to quality. Aleppo is steady at 30 @ 58c.

#### ROOTS.

GINGER, Jamaica, is scarce and the range of the market has advanced to 14 @ 17c. and 16 @ 17c. for bleached and unbleached respectively.

IPECAC has declined to \$1.22½ @ \$1.30, owing to competition. The demand, however, shows no appreciable increase.

JALAP has sold freely during the week, upward of 80 bags having been taken for export, for which 20 @ 21c. is said to have been paid. Second hands are now asking 27 @ 28c.

ORRIS shows a lower tendency, advices from primary sources indicating the placing of new stock.

RHATANY is reported scarce, and held at 7c.

RUMEX upon spot is held at 5½ @ 6c. From the other side supplies are offering at a lay down cost of 5½ @ 6½c.

TRITICUM REPENS is offering at 4¼ @ 5¼c. for spot goods.

SARSAPARILLA, Mexican, is quoted at 9 @ 10c. and this range is firmly maintained by importers.

## Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted free of charge. Write distinctly, on one side of paper only, and do not use postal cards.*

#### POSITIONS VACANT.

WANTED—Young man as prescription clerk (license) and to do general work of pharmacy; work not heavy and hours easy; position open Oct. 1; give references and state salary expected. Address Norton & Co., Port Jefferson, N. Y.

RELIEF CLERK wanted from Sept 18 for six weeks or more; give reference, salary, etc.; N. Y. State license. Address W. F. Muchmore, East Hampton, L. I.

#### POSITIONS WANTED.

PHARMACISTS RELIEF—For evenings only. J. Maxwell MacDonald, 339 Dean street, Brooklyn.

A GRADUATE of the Ontario College of Pharmacy and Pharm. B of University of Toronto wants position as assistant. F. O. Wilkinson, 44 McGill street, Toronto, Canada.

WANTED POSITION in chemical or pharmaceutical laboratory, by a graduate; five years' experience; good references; scientific work preferred; familiar with microscopical and chemical analysis; position most desirable in larger cities; Boston, New York or Brooklyn preferred. Address C. L. Grace, care of AMERICAN DRUGGIST, 37 College place, New York.

SITUATION WANTED.—Young man (23), married, wishes situation by Jan. 1, 1904, as manager of retail drug store in Penna., New York City or Maryland; graduate of P. C. P. Address "K," 437 Green street, Phila.

SITUATION WANTED by clerk speaking both German and French fluently; 3½ years' experience in store, and a years student of medicine; salary moderate. J. Baumgartner, 87 Varick street, New York City.

WANTED—Permanent situation in city by a graduate of I. C. P., '93; speaks German, and can furnish best of references. Address "Druggist," Box 304, Richmond, Ky.

POSITION WANTED—Position desired by a thorough manufacturing and analytical chemist in the chemical department of a drug house; have had experience as manager; highest references. Address "W. W.," Chemist, Room 37, at 97 Water street, New York City.

SITUATION WANTED by clerk; four years' experience in good Canadian store; wholesale preferred. R. Rutherford, Simcoe, Ont.

DRUG CLERK, 9 years' experience, desires to make a change about the 1st October, to go South preferable; speaking English and Spanish. Address "A. K.," at this office.

WANTED—A registered physician and druggist would like to contract with some first class house needing a representative to visit physicians and druggists; could furnish own team if necessary; correspondence solicited. Address Dr. "H.," care of AMERICAN DRUGGIST, 37 College place, New York.

WANTED—Situation as distributing advertising agent; will also call on trade if desired; would prefer to travel the Southern States; have had three years' experience in the drug business; can furnish the best of references including my present employer. Address, stating salary, "H. H. S.," care T. B. Rice, Greensboro, Ga.

LICENSED CLERK—10 years' experience; would relieve a day or night work; city preferred. Address "Carolus," care of AMERICAN DRUGGIST, 37 College place, City.

POSITION wanted by young man, 20; German; to learn retail drug business. Address H. Sonnenleitner, 406 E. 6th street, New York City.

SITUATION WANTED by druggist of nine (9) years' experience; two years in one of the best stores in New York City; graduate of N. Y. C. P.; 24 years of age; registered in New York and New Jersey with best of references. Address "Practical," care of AMERICAN DRUGGIST, 37 College place, New York City.

WANTED POSITION—A graduate pharmacist of wide experience, prepossessing appearance and a good talker, desires to take charge of an exhibit at the midwinter fair, at San Francisco. Address Columbia Drug Co., P. O. Box 272, Washington, D. C.

WANTED—Position in city by graduate of I. C. P. '93; speaks German and can furnish best of references. Address "Druggist," Box 304, Richmond, Kentucky.

PHARMACIST—Ph. G., experienced, satisfactory references, age 24, desires to come East, and only those wanting first-class help need write. Address "G. C. A.," 395 W. Harrison, Chicago, Ill.

#### BUSINESS OPPORTUNITIES.

FOR SALE.—We have for sale a large number of drug stores in various parts of the country. Before buying consult us. No charge to purchasers. The Pharmaceutical Exchange Bureau, 1501 Arch St., Philadelphia, Pa.

DRUG STORE in New Jersey; big bargain if bought at once. "Borax," care of AMERICAN DRUGGIST, 37 College place, New York.

FOR RENT—Corner store on Columbus avenue—plumbed and suitable for a drug store; exception, ally good neighborhood; extra inducements offered to the right party. For particulars apply to R. L. Julian, with Chas. E. Schuyler, No. 238 Columbus avenue, cor. 71st street, New York.

I WANT TO BUY a drug store in city or country doing \$20,000 or \$50,000 a year; will give in exchange good improved real estate. Address "Hawkins," 33 Orchard street, Newark, N. J.

FOR SALE—A drug store on one of the principal streets in Putnam; rent low; 7,600 inhabitants and doing a good business; for further information apply at once to Lock Box 136, Putnam, Conn.

FOR SALE—In Baltimore, Md., drug store and dwelling, together or separate; an excellent opportunity for Hebrew; two synagogues in neighborhood; prominent corner; good Hebrew trade; it is worth looking into; good reasons given for retiring. Address "I. V. A.," care AMERICAN DRUGGIST, 37 College place, New York.

FOR SALE—A drug store in a growing town in Central Pennsylvania, population 22,000; a good chance for a live young man with small capital; terms will be made to suit purchaser. Address "Ipecac," care AMERICAN DRUGGIST, 37 College place, New York.

Clerks and Employers should call at this office, register their wants and examine our list of POSITIONS WANTED POSITIONS VACANT and BUSINESS OPPORTUNITIES, which can be consulted free of charge.

Kindly mention this Journal when writing to Advertisers.

# ORIGINAL PACKAGE PRICES.

It should be understood that the prices quoted in this column are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a considerable range of prices.

| Drugs, Chemicals, &c.      |       |         | Nux Vomica, lb.            |       |         | Cardamon, Malabar,          |       |         |
|----------------------------|-------|---------|----------------------------|-------|---------|-----------------------------|-------|---------|
| Acetanilid, bulk, per lb.  | .38   | @ .41   | Nutgalla, China, per lb.   | .13   | @ .13%  | per lb.                     | .75   | @ .85   |
| " lbs., per lb.            | ...   | @ .58   | Aleppo, per lb.            | .13%  | @ .14   | Colchicum, lb.              | .12   | @ .14   |
| " ozs., per oz.            | ...   | @ .06%  | Oils, Essential:           |       |         | Coriander, lb.              | .08%  | @ .09%  |
| Acetate of lime:           |       |         | Anise                      | 1.35  | @ 1.40  | Cummin, lb.                 | .11   | @ .12   |
| Brown, per 100 lb.         | .90   | @ .95   | Almonds, Bitter            | 7.50  | @ .     | Fennel, Germ., lb.          | ...   | @ .12   |
| Gray, per lb.              | .01%  | @ .01%  | " Sweet                    | .20   | @ .43   | Flax Meal, per lb.          | ...   | @ .08   |
| Acids:                     |       |         | Bay, per lb.               | 3.50  | @ 4.00  | Foenugreek, lb.             | .08%  | @ .03   |
| Acetic Com'l.              | .01%  | @ .02   | Bergamot                   | 2.00  | @ 2.75  | Hemp, Russian, lb.          | .07%  | @ .     |
| Aquaforis, 36 deg.         | .03%  | @ .03%  | Cajeput, Native            | .45   | @ .55   | Mustard, yel. Cal. lb.      | .06%  | @ .07%  |
| " 40                       | .01%  | @ .04%  | Camphor                    | .07   | @ .08   | Mustard, brown, Cal. lb.    | .03%  | @ .04%  |
| Benzoic, German            | .47   | @ .54   | Canna                      | .75   | @ .80   | Poppy, per lb.              | .07%  | @ .08   |
| " English                  | .09   | @ .09%  | Citroneila, Native         | .24   | @ .28   | Quince, German, lb.         | .45   | @ .50   |
| Boracic, Wholes.           | .13%  | @ .14   | Clove                      | .70   | @ .75   | Rape, German, lb.           | .03%  | @ .03%  |
| " Powdered                 | .13%  | @ .14   | Copaiba                    | .70   | @ .80   | Rape, English, lb.          | .05%  | @ .08   |
| Citric, American           | .54%  | @ .46   | Croton                     | .75   | @ .80   | Soap, Castile, Mara         | ...   | @ .06%  |
| " English                  | ...   | @ .     | Cubeb                      | 2.25  | @ 2.50  | White, pure, lb.            | .06   | @ .06%  |
| Carbolic Crystals          | .13%  | @ .17%  | Erigeron, per lb.          | 1.45  | @ 1.60  | Soda Ash, lb., 48% per      | 1.50  | @ 1.80  |
| lb. bottle                 | .20   | @ .21   | Geranium Chirita           | 4.50  | @ 7.00  | Squilla, white, lb.         | .04%  | @ .06   |
| Muriatic, 16% deg.         | .09   | @ .13%  | Lavender                   | 1.20  | @ 1.85  | Sugar Milk, powd., lb.      | .11   | @ .14   |
| Nitric, 38 deg.            | .03%  | @ .04%  | " Garden                   | .40   | @ .90   | Sugar Lead, white, lb.      | .11   | @ .14%  |
| " 40                       | .04   | @ .04%  | Lemon, as to brand         | 1.35  | @ 2.10  | Sugar Lead, brown, lb.      | .05%  | @ .06   |
| Oxalic, English            | .06%  | @ .06%  | Lemongrass                 | .75   | @ .     | Salphate Ammonia, per       | 2.90  | @ 3.00  |
| " German                   | .06%  | @ .06%  | Musk, per lb.              | 7.00  | @ 8.00  | Do. Potash, 48% per         | 1.11% | @ 1.15  |
| Picric                     | .26   | @ .26%  | Myrbane                    | .17   | @ .10%  | lb.                         | ...   | @ 1.15  |
| Salicylic                  | 1.00  | @ 1.25  | Neroli                     | 22.00 | @ 29.00 | Do., Potash, 90% per        | 2.10  | @ 2.15  |
| Sulphuric                  | 1.00  | @ 1.25  | Nutmeg                     | 1.75  | @ 2.75  | lb.                         | ...   | @ 2.15  |
| Tartaric, Crystals         | .22%  | @ .23   | Orange                     | 1.50  | @ 1.65  | Sulphur, Roll               | ...   | @ .07%  |
| " Powdered                 | .23   | @ .24   | Organum                    | .24   | @ .     | " Flour                     | ...   | @ .01%  |
| Tannic                     | 1.05  | @ 1.20  | Pennyroyal                 | 1.90  | @ 1.25  | Spirita Nitro, U. S. P.     | .39   | @ .40   |
| Alcohol, Grain, per gal.   | 2.18  | @ 2.22  | Peppermint, bulk           | 2.20  | @ 2.40  | Spirit Ammonia, Arom.       | .44   | @ .45   |
| (Less rebate.)             |       |         | " HGH.                     | 2.50  | @ 2.65  | Sulphuric Ether             | .54   | @ .61   |
| Wood, 95% 97%              | 1.40  | @ 1.45  | Rose                       | 7.50  | @ 8.00  | Sumac, Sicily, ton          | 72.50 | @ 77.00 |
| Alcoholene                 | ...   | @ 1.62  | Sandalwood                 | ...   | @ 2.85  | " Virginia                  | 43.00 | @ 47.50 |
| Alum, Lump, per 100 lb.    | 1.75  | @ .     | Sassafras                  | .35   | @ .38   | Tar Barbadoes, gal.         | ...   | @ .45   |
| Ground, per 100 lb.        | 1.85  | @ 1.85  | Sassafras, Artificial      | .28   | @ .30   | Tin Crystals, bbls., per    | ...   | @ .     |
| Antifebrine, per oz.       | .19   | @ .20   | Spearment                  | 1.50  | @ 1.90  | lb.                         | ...   | @ .     |
| Antipyrine, per oz.        | 1.20  | @ 1.40  | Tansy                      | 2.00  | @ 3.00  | Jars, per lb.               | ...   | @ .     |
| Arrow root, Berm., lb.     | .24   | @ .25   | Wintergreen                | 1.62% | @ 1.70  | Tonka Beans, Angost.        | 1.75  | @ 2.00  |
| St. Vincent, in bbl., lb.  | .11   | @ .     | " Artificial               | 1.10  | @ 1.15  | lb.                         | ...   | @ .     |
| Arsenic:                   |       |         | Wormwood                   | 2.25  | @ 3.75  | Tonka Beans, Para, lb.      | .55   | @ .65   |
| Red Saxon, lb.             | .05%  | @ .06%  | Opium, Natur'l, ca. per    | 2.70  | @ 2.75  | " Surinam                   | .75   | @ .     |
| White                      | .03%  | @ .03%  | lb.                        | ...   | @ 2.80  | Turpentine, Spirits         | .31   | @ .38   |
| Balsam, Copaiba, lb.       | .30   | @ .35   | Opium, Ordinary            | 2.75  | @ 2.80  | Vanilla Beans, lb.          | 6.00  | @ 11.00 |
| Fir, Canada, gal.          | 3.00  | @ .     | Jobbing, per lb.           | 2.75  | @ 2.80  | " cut, lb.                  | 4.50  | @ 5.25  |
| Fir, Oregon, gal.          | .75   | @ .80   | Opium, Powd., per lb.      | 3.35  | @ 3.50  | Venice Turpentine, bar-     | ...   | @ .19   |
| Peru, lb.                  | 1.35  | @ 1.50  | Phenacetine, per oz.       | .85   | @ .90   | rels, lb.                   | .18   | @ .19   |
| Tolu, lb.                  | .93   | @ .25   | Prussiate Potash, Yel-     | ...   | @ .22   | Cans, lb.                   | ...   | @ .20   |
| Bark, Buckthorn, per lb.   | .10   | @ .     | low, per lb.               | .21%  | @ .22   | Wax, Brazil, Veg., lb.      | .09%  | @ .17%  |
| Cascara Sagrada, lb.       | .07   | @ .08   | Red, per lb.               | .39   | @ .42   | Japan, lb.                  | ...   | @ .08   |
| Elm, lb.                   | .10   | @ .12   | Quicksilver, flasks, per   | ...   | @ .54   |                             |       |         |
| Orange peel                | .06   | @ .07   | lb.                        | .52   | @ .54   | Animal and Vegetable Oils.  |       |         |
| Sassafras, per lb.         | .08   | @ .08%  | Quinine:                   |       |         | Linseed, City, raw, gal.    | .37   | @ .     |
| Soap, lb.                  | .03%  | @ .04   | Domestic, bulk, oz.        | .22   | @ .23   | Linseed, City, boiled,      | ...   | @ .50   |
| Bicarb. Soda, Engl., lb.   | .03%  | @ .03%  | Domestic, ozs.             | .28   | @ .29   | gal.                        | ...   | @ .     |
| domestic, lb.              | 2.00  | @ 3.00  | German, bulk               | .18%  | @ .19   | Linseed, Western, raw,      | ...   | @ .     |
| Bichromate, Pot'h, lb.     | .10%  | @ .11   | German, ozs.               | .27%  | @ .29   | gal.                        | ...   | @ .     |
| Bismuth, Sub. Nit.         | 1.05  | @ 2.00  | Roots, Aconite, lb.        | .09   | @ .14   | Lard, City, Ex. Winter,     | ...   | @ .     |
| per lb., bulk              | ...   | @ 2.00  | Althea, cut, lb.           | .15   | @ .18   | gal.                        | ...   | @ .     |
| Bismuth, Sub. Carb.        | 2.25  | @ 2.30  | Alkanet, lb.               | .06   | @ .07   | Lard, City, Prime, pres-    | ...   | @ .65   |
| per lb., bulk              | ...   | @ 2.30  | Arnica, lb.                | .12   | @ .13   | ent make, gal.              | .64   | @ .65   |
| Bleach'g Powd., per lb.    | .02%  | @ .03   | Beladonna Ger., lb.        | .08   | @ .12   | Lard, City, Extra No.       | .55   | @ .65   |
| Blue Vitriol, lb.          | .03%  | @ .03%  | Blood, lb.                 | .05   | @ .06   | 1, gal.                     | .50   | @ .55   |
| Borax, refined, lb.        | .08   | @ .08%  | Calamus, lb.               | .07   | @ .08   | Lard, City, No. 1, gal.     | .72%  | @ .73   |
| Concentrated, lb.          | .07%  | @ .08   | Calamus, bleac'd, lb.      | .21   | @ .24   | " West, prime, gal.         | ...   | @ .73   |
| Brimstone, best ad, ton    | 19.00 | @ 19.50 | Colchicum, per lb.         | .14   | @ .18   | Cotton-seed, C r u d e,     | ...   | @ .32   |
| Bromide Potash, Do-        | ...   | @ 19.50 | Colombo, lb.               | .06%  | @ .11   | grades, gal.                | .31   | @ .32   |
| mestic, b'l, lb.           | .35   | @ .36   | Dandelion, Germ. lb.       | .07%  | @ .08   | Cotton-seed, Summer         | ...   | @ .39   |
| bottles, lb.               | .39   | @ .40   | Dogwood, lb.               | .08   | @ .10   | Yellow, prime, gal.         | .38   | @ .39   |
| Bromide Ammonium,          | ...   | @ .44   | Galangal, lb.              | .04%  | @ .04%  | Cotton-seed, Summer         | ...   | @ .37   |
| bulk                       | .43   | @ .44   | Gentian, lb.               | .03%  | @ .04   | Yellow, off grades          | .36   | @ .37   |
| Bromide Sodium, b'l.       | .40   | @ .41   | Ginseng, lb.               | 2.25  | @ 3.00  | Cotton-seed, Winter         | ...   | @ .44   |
| Bromine, bulk              | .38   | @ .42   | Ginger, Jamaica,           | ...   | @ .17%  | White, gal.                 | .43   | @ .45   |
| Burgundy pitch, per lb.    | .02%  | @ .03%  | blcd., lb.                 | .16%  | @ .17%  | Sperm, Crude, gal.          | ...   | @ .75   |
| Cacao Butter:              |       |         | Ginger, Jamaica,           | ...   | @ .17%  | Sperm, Natural Spring       | .79   | @ .81   |
| 12-lb. boxes, lb.          | .30   | @ .31%  | unblch., lb.               | .15   | @ .17   | gal.                        | ...   | @ .86   |
| Dutch A., per lb.          | .32%  | @ .34   | Golden Seal, lb.           | .20   | @ .21   | Sperm, Natural Win-         | .84   | @ .86   |
| Caffeine                   | 1.05  | @ .     | Hellebore, powd., lb.      | .07%  | @ .08   | ter, gal.                   | .85   | @ .87   |
| Camphor, ref'd., bbls., lb | .48%  | @ .49   | Ipecac, lb.                | 1.22% | @ 1.36  | Sperm, Bleached Win-        | .90   | @ .92   |
| cases, lb.                 | ...   | @ .51   | Jalap, lb.                 | .27   | @ .28   | ter, gal.                   | ...   | @ .92   |
| Cantharides, Chinese, lb.  | .28   | @ .30   | Kava Kava, lb.             | .30   | @ .     | Whale, Crude, gal.          | ...   | @ .     |
| Russian, lb.               | .70   | @ .75   | Licorice, select, lb.      | .08   | @ .15   | Whale, Natural Win-         | .47   | @ .48   |
| Carb. Ammonia              | ...   | @ .09   | " P c w d., lb.            | .05   | @ .12   | ter, gal.                   | ...   | @ .51   |
| casks, lb.                 | .08%  | @ .09   | Lovage, lb.                | .50   | @ .55   | Whale, Ex. Bl'ch'd, gal.    | .52   | @ .53   |
| Castor Oil, cases, lb.     | .15   | @ .15%  | Mandrake, lb.              | .03%  | @ .04   | Mhale, Crude,               | ...   | @ .     |
| Barrels, lb.               | .14%  | @ .15   | Orria, Florentine, lb.     | .25   | @ .35   | Sound, gal.                 | .33   | @ .     |
| Caustic Soda, 70%, 100 lb. | 2.70  | @ 2.82% | Orria, Verona              | .12   | @ .14   | Dark, pressed, gal.         | .30   | @ .     |
| Caustic Soda, 60%, 100 lb. | 2.90  | @ 3.10  | Pink, lb.                  | .22   | @ .25   | Light, pressed, gal.        | .38   | @ .     |
| Chalk, Engl. Precip.       | ...   | @ .06   | Rhubarb, whole, lb.        | .70   | @ .80   | Bleached, Winter, gal.      | ...   | @ .     |
| bulk, lb.                  | .04   | @ .06   | Sarsaparilla, Hond, lb.    | .28   | @ .42%  | Extra Bleached, gal.        | .44   | @ .     |
| Chloral Hydrate Crys-      | ...   | @ 1.05  | Sarsaparilla, Mex., lb.    | .09%  | @ .10   | Tallow, City, prime gal.    | .50   | @ .55   |
| tals, bulk, per lb.        | .05   | @ 1.05  | Senega, lb.                | .35   | @ .36   | Western, prime, gal.        | ...   | @ .55%  |
| Hydrate crusts, bulk,      | ...   | @ 1.00  | Serpentaria, lb.           | .20   | @ .22   | Cocunut, Ceylon, lb.        | .05%  | @ .06%  |
| per lb.                    | .02%  | @ 1.00  | Valerian, Belgian, lb.     | .07   | @ .07%  | Cochin, lb.                 | .06%  | @ .06%  |
| Chlorate Pot. Crys., lb.   | .14%  | @ 1.5%  | " German, lb.              | .10   | @ .12   | Cod, Domestic, gal.         | .38   | @ .42   |
| Pow'd, lb.                 | .15%  | @ 1.5%  | Saffron, Ann., lb.         | .28   | @ .30   | Foreign, gal.               | .42   | @ .45   |
| Chloroform, Bulk, lb.      | .50   | @ .51%  | Spanish, Valencia, lb.     | 6.50  | @ 7.00  | Red Elaine, gal.            | .44   | @ .48   |
| Cinchonidine, Sulphate     | ...   | @ .02%  | Spanish, Alicante, lb.     | 5.00  | @ 5.50  | Red Saponified, lb.         | .05%  | @ .05%  |
| of, German, oz.            | .02   | @ .02%  | Sal Ammoniac, lump, lb.    | .08%  | @ .     | Bank, gal.                  | .60   | @ .61   |
| Citrate U. S. P. Iron, lb. | ...   | @ .59   | Do., Granulated, lb.       | .05%  | @ .09   | Straits, gal.               | .41   | @ .42   |
| Soluble                    | ...   | @ .55   | Sal Soda, Eng., 100 lb.    | 1.02% | @ 1.05  | Olive oil for table in tins | .50   | @ 1.25  |
| Iron and Ammonia, lb.      | ...   | @ .60   | " American                 | .90   | @ .95   | Olive, Com'n, bbls, gal.    | .58   | @ .60   |
| Iron and quinine           | 1.50  | @ 1.55  | Salt peter, crude, per lb. | .04%  | @ .05   | Neatfoot, prime, gal.       | .77   | @ .80   |
| Iron and strychnine        | 2.00  | @ 2.05  | lb.                        | ...   | @ .08   | Palm, prime, Lagos, lb.     | .05%  | @ .06   |
| Phosphate, U. S. P. lb.    | ...   | @ .57   | Seeds, Anise, Ital., lb.   | .09   | @ 1.04% |                             |       |         |
| Pyrophos, U. S. P., lb.    | ...   | @ .55   | Anise, German, lb.         | .06   | @ .06%  |                             |       |         |
| Pyrophos, Soluble, lb.     | ...   | @ .55   | Anise, Star, lb.           | .22   | @ .23   |                             |       |         |
| Potash, per lb.            | ...   | @ .49   | Canary, Smyrna, lb.        | .33%  | @ .03%  |                             |       |         |
| Soda, per lb.              | ...   | @ .49   | Canary, Sicily, lb.        | .00%  | @ .04   |                             |       |         |
| Cobalt, pow'd, lb.         | ...   | @ .28   | Canary, lb.                | .07   | @ .07%  |                             |       |         |
| Cocaine Muriate, per oz.   | 5.25  | @ 6.20  | Cardamon, Aleppo,          | ...   | @ .75   |                             |       |         |
| Codeine, bulk, oz.         | 4.15  | @ .     | per lb.                    | .65   | @ .75   |                             |       |         |
|                            |       |         | Celery, lb.                | .10%  | @ .11   |                             |       |         |

# American Druggist and Pharmaceutical Record.

## A JOURNAL OF PRACTICAL PHARMACY.

VOL. XXIII. No. 18.

NEW YORK, SEPT. 28, 1893.

WHOLE No. 266.

### AMERICAN DRUGGIST PUBLISHING COMPANY.

37 COLLEGE PLACE, NEW YORK.

A. R. ELLIOTT, PRESIDENT.

|  |        |
|--|--------|
| Subscription Price—For the United States and Canada, - | \$2.00 |
| If paid in advance direct to this office, -            | 1.50   |
| "    "    for Foreign Countries, - - -                 | 2.50   |
| Single Copies, - - - - -                               | .15    |

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We are not responsible for any money paid to agents. All remittances should be made direct to this office. Express Orders, Post-Office Orders and Drafts on New York should be made payable to the "American Druggist Publishing Company" and addressed to them at 37 College Place, New York.

*Liberal Commissions to Club Agents.*

### THE ART OF ADVERTISING.

THE art of advertising, if such a term can be applied to a system having no clear rules or definite plan, is one of the curious developments of this century. In studying its growth, the student cannot fail to be impressed with the great contrast afforded by the methods at present in use to attract the attention of a critical public, with those of a period dating back—say fifty years ago. It is a noteworthy, but an easily understood circumstance, that the most persistent and therefore the most successful advertisers have been makers or venders of remedies for the alleged cure of bodily infirmities and disease. But that the methods in use over half a century ago for vaunting the miraculous properties of this salve and that pill, should have undergone no material change in the years which have elapsed is not so easy of explanation. In every other branch of trade, profession or business, the system of advertising has undergone a marked change; and among the patrons of the newspaper, the bill board and other mediums of attracting public attention, new candidates for fame have arisen, and thrust themselves into successful prominence by various devices not lacking ingenuity nor without interest. The dealer in nostrums, with here and there a notable exception, has, however, lagged behind in the race, but, such is the credulity of the public, with no apparent loss of revenue. He still plies his trade with every evidence of a brisk demand for his peculiar compounds, and a due appreciation upon the part of a disease-afflicted public, of his

humanitarian (*sic*) efforts toward the preservation of the race. That the public is becoming skeptical of the claims made in these days by the patent medicine manufacturers is, however, becoming evident; and this we think is largely due to the lack of ingenuity displayed by the makers. The testimonials adduced by contemporary nostrum dealers are, for example, singularly deficient in point; the cures cited are commonplace, and there is a hackneyed ring to each recital. Take any of the testimonials of cures effected by Blank's Cure for Consumption and compare it with a testimonial published sixty years ago by the proprietors of Congreve's Balsamic Elixir:

"My cough, which had broken fifteen blood vessels, was completely subdued. I may now say I am a miracle in the eyes of all those who were in the habit of seeing me."

This is a testimonial which has more than the record of a simple cure to recommend it and is something more effective than the ordinary tale of miraculous recovery. Whether it would be equally well adapted for use as a puff for Blank's Cure, in these days, is not so certain; but testimonials every whit as wonderful as the foregoing have appeared to spread the fame of compounds of very recent introduction.

The modern advertiser has several advantages over his type of a few decades back, and prominent among these is the advertising expert. But notwithstanding this the business we have in mind—the patent medicine industry—has not flourished proportionately with other industries. The explanation is easy. Under the influence of so-called experts in advertising, the patent medicine men have been led to set typography above the merits of skill in composition, and to place pictorial illustrations before variety of narrative. An example of the style of appeal formerly in vogue, as given by a writer of the period, will fully bear out our statement. The remedy advertised is "Baker's Patent Antidote for the Prevention of Seasickness," and its efficacy is thus borne testimony to by an obliging ship's steward:

"This is to certify that Baker's Patent Antidote was taken by a lady going to Rotterdam in the "Ocean," who found great relief from a single dose, having a heavy sea on at the time, and likewise, several gentlemen. I think myself that the Antidote is a very excellent medicine to take.—F. WILLIS, Steward."

"Mr. Willis," as our chronicler wisely observes, "is apparently not much used to writing, but the statement is highly satisfactory; and it is a comfort to know that great men may in future be saved from a malady which renders them not only wretched but ludicrous."

The space which Mr. Baker takes up with a description of the effects of seasickness would never be allowed by modern advertisers; it would be deemed a useless waste of paper and ink. Yet we have no reason for doubting that MR. BAKER was successful. Here is a sample of his narrative:

Who has not suffered from Sea-Sickness?—that remorseless fiend, who, sparing neither age nor sex, intelligence nor respectability, makes a point of setting at defiance all the decorums of etiquette, all the grace of attitude, all the claims of humanity. I have seen dignified statesmen, lovely women, poets of the most romantic, divines of the most spiritual cast of countenance, all huddled together at a ship's side with confusion truly humiliating, yellow as daffodils, and moaning as dismally as a north wind whistling through the keyhole of a back attic. Sea-Sickness! The very word is an emetic; and I heave while I write it.

The Chinese are credited with exceptional skill in the art of advertising, but we scarcely think them equal to the Japanese, a sample of whose peculiar style of appeal we present elsewhere in this issue.

#### ON A CERTAIN CONDESCENSION IN FOREIGNERS.

MR. ERNEST HART who registers himself at the Arlington Hotel, Washington, as "ERNEST HART, F.R.C.S., D.C.L., London, Editor *British Medical Journal*, Dean of St. Mary's Hospital," has seen fit to prepare and deliver to his American confrères at the Pan-American Medical Congress recently held at Washington, and at the reception of medical editors, most interesting homilies on the beauty of humility. Unfortunately for the salutary influence which these homilies might have had, his hearers when admonished to "be humble" could not but recall that disciple of humility immortalized by DICKENS in Uriah Heep, and with such an example before them there is, despite the admonitions of MR. HART, a disinclination to "be humble."

However, the physicians of the United States have found in DR. WM. A. HAMMOND, of Washington, a most able champion, as is shown in the appended excerpts from a letter on the subject published in the *New York Medical Journal*. MR. HART condemns the frequency with which the names and portraits of eminent medical men appear in the daily papers of the United States as contrasted with their exclusion from the English papers. DR. HAMMOND writes:

The medical profession in England is of no social or political importance. The average medical man is a little lower than the lawyer, a little higher than the tradesman; the people do not care for him.

With us, on the contrary, no class ranks socially above the medical profession; in England its members are looked down upon with something of contempt by the nobility and gentry.

When an American physician pays a professional visit to the highest in the land, he goes in at the front door and waits in the drawing-room till summoned to his patient. In England the question was discussed in a medical journal a few years ago of whether, when called to the house of a nobleman or that of a country gentleman, the medical practitioner should go in by the main entrance or by that used by the servants. As a matter of fact, he often enters by the back door and waits in the hall until invited to go upstairs to his patient. Think of it, Mr. Editor! Think of the members of a learned profession being treated as menials, and think of any one, from the President of the United States down, acting in such a way to his medical adviser! The social position of the average medical practitioner in England is one of extreme degradation, and no one knows it better than Mr. Hart. Here he calls upon the President of the United States and is treated with respect! At home the *entourage* of the Queen is closed to him.

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Relative to Mr. Hart's opinions, which he freely expressed, in regard to physicians having a pecuniary interest in the sale of any medical preparation, it is to be borne in mind that the "surgery" is the common appendage to the average English practitioner's residence, and that he there prepares and sells medicines, not only to his own patients, but to anybody who requires them

and that we see such items in the bills that he renders to his patrons (for he regards them as "patrons") as an "enema" so much, a "draught" so much, an "anodyne" so much, and so on.

But it is not in medicine alone that this condescension is manifested. It is observable in almost every walk in life, whether in science, art, or literature, and it is none the less annoying for being so ill founded. To the honor of the pharmacists who represented Great Britain at our recent pharmaceutical meetings in Chicago be it said that they were either so well pleased with what they saw or so considerate of their hosts as to avoid the grave error which MR. HART has fallen into.

This air of condescension is, however, frequently manifested by foreign pharmacists resident both here and abroad. If these gentlemen will seriously consider the relative status of pharmacy and pharmacists as a whole they cannot but see, if at all fair minded, the many excellences.

In no country, save possibly Germany, has the pharmacist so enviable a social position as here, and there the social position of the few proprietors is gained at the cost of the many who are unable to secure a "concession."

In no country is real ability as a pharmacist so quickly recognized or so richly rewarded as in the United States.

In no country has there been prepared a pharmacopœia with which that of the United States would not compare favorably, and that too solely by means of voluntary unpaid work without any government or other subsidy whatever.

Finally, in pharmacy proper, more especially galenical pharmacy, American methods are equal if not superior to those of any other nation. As an instance of this may be cited the general favor with which American fluid extracts are being received the world over.

#### "APPROBATION FROM SIR HUBERT."

IT is, we think, with pardonable pride, that we reproduce below two notes, showing that the enterprise shown by the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD in presenting so prompt and complete an account of the proceedings of the American Pharmaceutical Association, as appeared in our issue of August 24, the week after that meeting adjourned has been appreciated.

To the Editor of the AMERICAN DRUGGIST:

SIR: I must congratulate you upon the journalistic ability displayed by you in publishing so prompt and so excellent a report of the proceedings of the A. P. A. Experience has taught me the numerous difficulties in the way of such an undertaking.

JOSEPH P. REMINGTON.

This from the presiding officer of the association "is praise indeed," while one who was unfortunately debarred the pleasure of attendance writes:

I was compelled at the last moment to forego the pleasure of being present at the Chicago meeting of the A. P. A., but your account of the proceedings is so excellent that, after reading it, I feel almost as though I had really been present.

F. J. WULLING.

Such cordial and unsought commendations are most gratifying indications that our work is appreciated.

**Reciprocal Registration.\***

BY HENRY R. SLACK, MD., PH.M.,

Secretary Georgia State Board of Pharmacy.

Some time since I read an able article in THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD indorsing the action of the Colorado Board for seeking to have their law so amended as to prohibit recognition of licenses from other State boards.

It is regarded as an axiom of history that "revolutions never go backward," and in politics that "liberties once granted to the people are never surrendered without a struggle." Here, however, we have the spectacle of the exception that proves the rule, in a State board seeking by legislative enactment to be deprived of a liberty coveted by many of her sisters. A clause not mandatory, but optional, granting permission to recognize licentiates of other boards, and why?—because they wish to be progressive! It seems to one viewing the situation from a distance that Colorado's entire energy is being spent in one direction—progressive and aggressive bi-metallism or rather white metallism.

The author intimates that it is only the younger and weaker boards that are anxious for reciprocity, and this largely because it will add dignity to them to have their licenses recognized by older and more conservative boards. This sounds plausible, but facts will not sustain this theory. Last month I addressed a letter to the secretary of every State board in the United States and have received answers from thirty-four, leaving only two, Utah and California, to hear from. Nineteen favor reciprocity, ten oppose, four oppose on present plan, and Ohio is divided with a majority favorable. Fourteen have already accepted the plan suggested by the secretaries at their meeting in New Orleans. In point of age the boards favoring reciprocity have the advantage, Georgia leading with the oldest board, established in 1825, while Tennessee with a law only applying to fourteen cities, and a board not yet six months old, is arrayed in opposition.

I find the average age of the twelve boards that oppose interchange of certificates to be nine years and seven months, while that of the fourteen accepting it is nearly thirteen years. (Dates excepting Georgia's taken from Hallberg's "Pharmaceutical Calendar.")

As to lending dignity, how much would Rhode Island's recognition increase the importance of Missouri's board, or Maine's, Michigan's.

"Why reciprocity, 'tickle me and I will tickle you?" facetiously asks the author of the article above referred to. This question is too absurd to require an answer, and shows that while he may have some knowledge of the "Staats-Examen" of Germany he has small conception of State sovereignty. No civilized nation expects or demands for its citizens greater privileges or immunities in a foreign country, than she is willing to grant the citizens of that State. It is only when dealing with inferior races or heathen nations that we ever have the effrontery to demand greater privileges for our citizens than we expect or promise to accord theirs; and this state of affairs has not yet been reached in these United States.

Quite a number oppose reciprocity because they think their law does not allow it. That ground is no longer tenable, as the Arkansas board has solved that question; then, too, very few of the laws specify how the examination shall be conducted, leaving it entirely in the hands of the board.

The Attorney-General and Supreme Court Judges of Georgia ruled that the examination of diplomas or certificates, held by the applicant, if satisfactory to

the board, would satisfy that clause in the law, "Who shall have passed a satisfactory examination." This clause is in every law I have seen, and if it is a principle of law in Georgia it is a principle of law in Maine. It is on this clause that the able board of Michigan bases its right to interchange, and, as it has stood the test of a Supreme Court decision, I suppose it is correct. That being true, we can have Reciprocity of Registration if the boards desire it.

The advantages to be gained by a system of interchange of certificates, on the plan suggested by the secretaries' meeting at the A. P. A., in New Orleans, in my opinion far outweigh the disadvantages; though by no means perfect, is still a long stride in the right direction.

When could a more opportune time present itself for the discussion of this subject than this, our Columbian year, in the evening of the nineteenth century! When men from every section of the globe have met together as brothers to discuss plans for benefiting the human family, shall the honorable profession of pharmacy reverse the wheels of progress and erect Chinese walls of exclusion along the State lines of this *E pluribus unum*?

Now as "The law allows it," let us, casting aside prejudice, formulate a plan that can be accepted by even conservative Old New England, for she has far more to gain by it than we of the South and West.

Never in the history of the world has the poet's dream

"The Parliament of man, the Federation of the world"

been nearer realization than to-day in our numerous World's Congresses.

Germ-free drinking water may be obtained, says K. Schipiloff, by adding from 5 to 6 centigrammes or less of potassium permanganate to each liter of water. Where the water is not heavily loaded with germs 1 to 2 centigrammes will suffice for each liter. The permanganate not only destroys all bacteria but even imparts an agreeable (?) taste to the water. To make sure of accomplishing the desired object the permanganate should be added until it imparts a permanent, slight rosy tinge to the water. This color is then discharged by the addition of a very small proportion of sugar or of brandy.

Salacetol is the name applied to the salicylic acid ester of acetol. It is designed as a substitute for sodium salicylate and also for salol. It is claimed that carbolic acid poisoning has followed the decomposition of salol in the system, but that in salacetol

$C_6H_5 < \begin{matrix} COOCH_3 \\ OH \end{matrix} COCH_3$ , the salicylic acid is combined with wholly harmless acetone alcohol or acetol, hence this cannot occur. Salacetol is made by heating monochlor-acetone with sodium salicylate. It crystallizes from alcohol in fine, light sparkling crystals. It is very difficultly soluble in cold water, and somewhat soluble in hot water. It dissolves readily in alcohol, ether, carbon bisulphide, chloroform, benzol, etc. It melts at 70° C. and has a slightly bitter taste. According to Bourgett salacetol is of value in rheumatism, the dose being from 2 to 3 grammes (30 to 45 grains) per day, while good results have followed its use in diarrhoea, etc., in doses of 2 to 3 grammes (30 to 45 grains) in 30 grammes (about 1 ounce) of castor oil.

Iodine Water for Influenza has been commended by G. Müller (D. ärztl. Prakt.) The iodine water should be freshly prepared by giving five drops of a mixture of 2 parts of iodine and 4 alcohol to half a glass of water for one dose twice a day.

\* Presented to the International Pharmaceutical Congress and referred to the Section on Education and Legislation of the A. P. A., Chicago, 1893.

## STARCHES IN ROOT DRUGS.\*

By EDSON S. BASTIN, A.M., F.R.M.S.,

Professor of Botany and Pharmacognosy in the School of Pharmacy of the Northwestern University, Chicago, Ill.

It occurred to the writer that a study of the starches found in crude drugs might yield results which would be of service in identifying the drugs and in detecting adulterations. In the adulteration of powdered drugs, naturally farinaceous materials, such as the wastes of mills, are commonly employed, and the forms of the starches from these sources are for the most part well known, and figures of them have frequently been published in works on materia medica. If the forms and structures of the starches that occur in most crude vegetable drugs were equally well known, or if authentic studies of them were available for reference, they would be of great value to the pharmacist in the detection of fraudulent mixtures. Other than microscopic means of detecting such frauds are practically hopeless, since assaying every sample purchased is both tedious and expensive, while the microscope is readily and quickly available and its employment inexpensive.

Starch is by far the most abundant and universally distributed of non-proteid reserve food materials found in plants, and it always exists in the form of corpuscles or granules. These appear to be composed of two substances: granulose, which constitutes by far the larger part of the grain (90 to 95 per cent. of its weight) and a skeleton composed of farinose or starch cellulose. It is only the former of these that stains blue with iodine solution. When all of the granulose has been dissolved out by maceration in saliva kept at a temperature of 98° F. the skeleton of farinose that remains stains only a brownish color with iodine. It is to be remarked that Krabbe denies that starch grains are composed of these two different substances, but regards the so-called farinose skeleton as a product of subsequent chemical change. But the weight of scientific opinion is in favor of the former view.

In structure the starch grain is not of equal density throughout. Every starch grain has a hilum or nuclear portion around which the rest of the grain has been deposited in layers, and the hilum and layers next to it are less dense than those farther exterior. The hilum may be located centrally in the grain, which then usually has a rounded form, or it may be located to one side of the center, in which case the form is apt to be elongated. Moreover, different layers of the grain contain usually different proportions of water, for which reason there is often appearance of concentric or eccentric lines or curves about the nucleus. These are very conspicuous in some starches, for example in that of the potato, but difficultly visible on many starches, and in this case rendered distinct only by application of reagents that cause the grains to swell. On many others, perhaps the majority, concentric markings are not demonstrable at all.

Starch grains, in nearly all cases, if not in all, are formed by the agency of proteid bodies, either chloroplasts or amyloplasts. That formed in chloroplasts under the action of sunlight, is gradually dissolved and transferred as glucose or some other soluble carbohydrate to some other part of the plant, where it is either employed in the processes of growth or else is stored again, usually in the form of starch, for future use. It is this, the reserve starch, which forms the conspicuous grains that are the subjects of our present study. These are formed by amyloplasts, partly at least, at the expense of the amyloplast itself, and partly, according to the investigations of A. Meyer and M. E. Lau-

rent, not only from glucose and canesugar, but out of various other carbohydrates or bodies related to them, such, for example, as mannite. Strasburger holds, and apparently with good reason, that in rare instances starch is formed from the general protoplasm of the cell, and not solely from amyloplasts, and some have maintained that it is occasionally formed by mere crystallization in the cell, without the aid of any proteid whatsoever; but this certainly remains to be demonstrated.

Next to starch, perhaps the most common non-proteid reserve food material is fixed oil, and many seeds contain this to the exclusion of starch. There is the best of reason for believing, however, that fixed oil is made from starch; for in all the cases of oily seeds or fruits that have been investigated, it has been found that in the unripe state the seed or fruit contains abundance of starch with little or no oil, and that as ripening progresses the starch is replaced by oil.

There are some plants, however, notably many compositæ, in which another carbohydrate, inulin, takes the place of starch from the first as a reserve food material. For this reason we look in vain for starch in the cells of inula, taraxacum, lappa, etc. From the whole group of fungi, also, starch is absent, being replaced functionally by some other carbohydrate. This seems to be connected with the fact that none of the fungi contain chlorophyll, and hence they are unable, like green plants, to utilize carbon dioxide as food.

As to whether starch grains are to be regarded as crystalline or colloid bodies, there is a difference of opinion among high scientific authorities. Schimper and Arthur Meyer regard them as sphere crystals, but Strasburger controverts this view and holds that the layers of the starch grain are formed not by crystalline deposit but by the conversion of successive layers of proteid matter. The weight of scientific opinion is with Strasburger. There are the best of reasons for believing that the polarization effects produced by starch grains are not due to crystalline structure but to stress or strain, of the same nature as the polarization of glass when it is subject to strain. The polarizing effects are precisely such as would be produced in any transparent solid composed of layers, the inner ones of which were kept in a state of stress by the compression exerted by the outer ones. Moreover, when by use of a swelling reagent, such as caustic potash solution, the outer layers are made to expand by the imbibition of water, the polarization effects immediately disappear. Were the solid particles of a crystal thus forced apart by water each particle would still exhibit polarization phenomena.

The tissues which are most liable to contain starch, or which contain it in largest quantity, are those of the parenchymatous series, though it sometimes occurs in the latex of laticiferous tissues, and even in ducts and tracheids. In the stems of dicotyledons it occurs chiefly in the parenchyma of the middle and inner bark, in the medullary ray cells and in the cells of the pith. In the roots of these plants it has a similar distribution, being for the most part confined to the middle and inner bark, and the medullary rays, pith not being present in these organs. In succulent stems and roots, of course, it also commonly occurs in the xylem tissues of the fibro-vascular bundles.

The study of the following starches does not profess to be exhaustive. For example, it would be desirable that the study be not confined to a few samples of each drug, but that a large number of samples, representing as many different conditions of growth as possible, be studied, so as to ascertain the limits of variation in the starches from the same species of plant. While in preparing this paper quite a number of different

\*From *The Apothecary*, Vol. II., No. 2.

samples have in most cases been studied, not nearly as large a number of specimens have been examined as should be desired in order to learn the limits of variation in the same species. Still, enough has been done, it would seem, to establish the general fact that the limits of variation are not wide, and that, in many cases at least, the starches are so characteristic as to make their study an important means of identifying a drug.

No starch could be found in any of the following root drugs: *Taraxacum*, *inula*, *lappa*, *pyrethrum* and *senega*. Most of the other root drugs examined were found to contain it in abundance, but in a few drugs, as the *rhatanies*, *gelsemium* and the *licorices* the quantity was relatively small. The starches were studied by aid of the iodine and dilute potassium hydrate tests and by means of the polariscope. All the drawings have been made on the same scale, with the camera lucida, a magnifying power of 875 dimeters having been used in each case.

The starch grains in Mexican sarsaparilla are, when single, usually spherical, with a central hilum, which, in the larger grains, is commonly more or less angularly

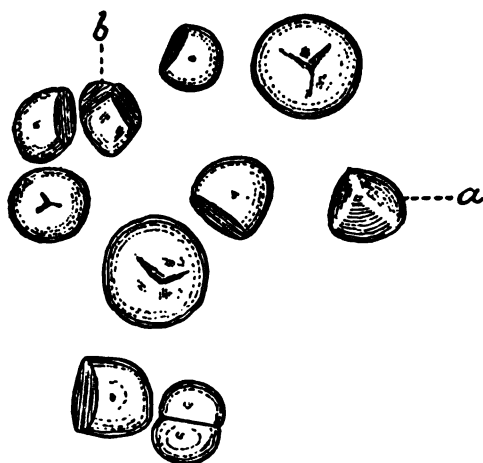


FIG. 1.—STARCH OF MEXICAN SARSAPARILLA.

fissured and with indistinct concentric markings, if any. Many of the grains are double, treble, or even sometimes quadruple, and, of course, when the members of the group are broken apart they expose one or more flat sides, as in *a* and *b*, Fig. 1.

The starch grains of Honduras sarsaparilla average very nearly the same size as those of the Mexican va-

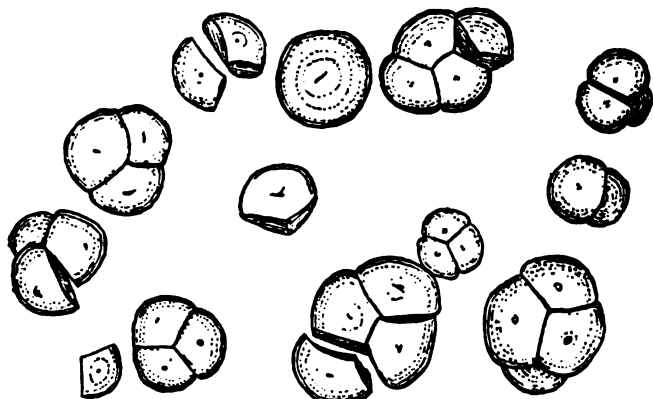


FIG. 2.—STARCH OF HONDURAS SARSAPARILLA.

riety but a much larger number of the grains are compound, and the hilum is not so often fissured.

The starch grains of the *rhatanies* are also spherical or spheroidal in form, but of larger size than those of

the *sarsaparillas*. In Peruvian *rhatany*, Fig. 3, the hilum is central or sub-central, rather indistinct and seldom fissured. Only about one circle is discernible about the hilum, and that only in the larger grains.

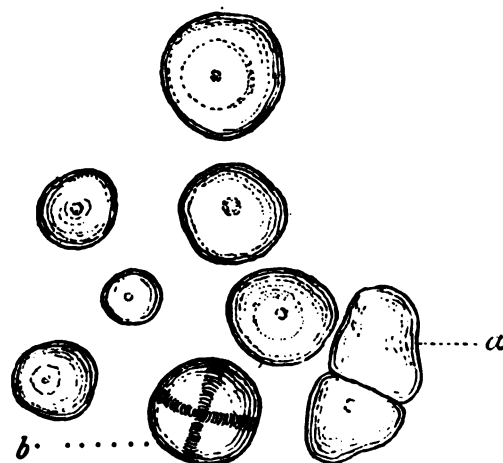


FIG. 3.—STARCH OF PERUVIAN RHATANY.

Occasionally double grains are seen, but these are not common. (See *a*, Fig. 3.) *b* shows a grain as it appears when viewed between crossed Nicols.

The grains of *Savanilla* average somewhat larger than those of Peruvian *rhatany*, they are more commonly compound, and the hilum is not infrequently

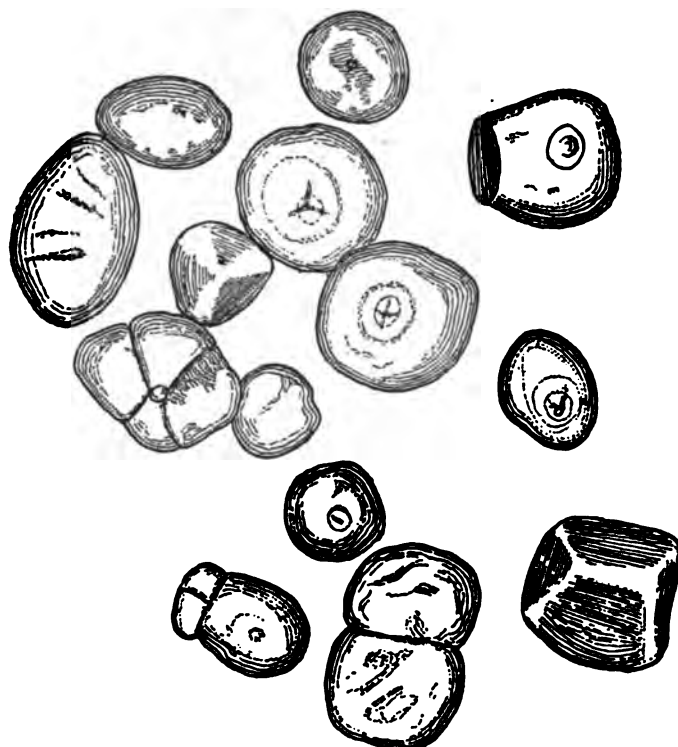


FIG. 4.—STARCH OF SAVANILLA RHATANY.

somewhat angularly fissured, as shown in Figs. 4 and 5. In this *rhatany*, grains which appear single when viewed by ordinary light, often reveal their double character when viewed by polarized light. In Fig. 5, *b* is an ordinary grain with a central hilum and showing under polarized light a nearly rectangular cross, while *a*, in the same figure, shows a grain which, under the polariscope, reveals a hilum toward either end.

Texan *rhatany* has starch grains which are similar in general structure to the preceding, but averaging larger and having more distinct concentric circles about

the hilum. The latter is sometimes fissured with a straight or more or less angular fissure. *a* shows a grain as seen by polarized light.

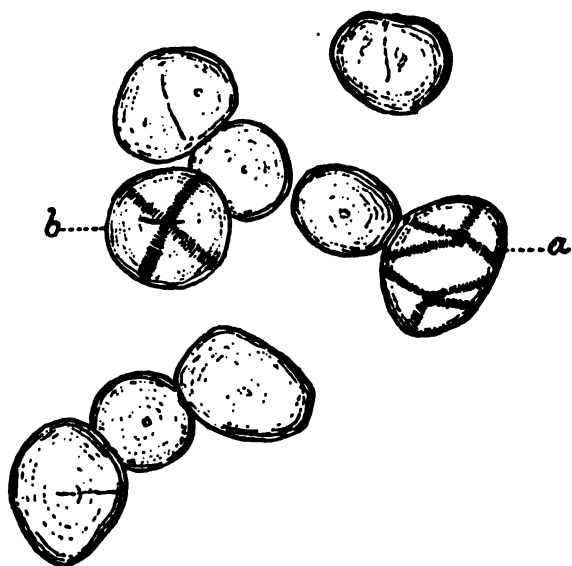


FIG. 5.—STARCH OF SAVANILLA OR NEW GRANADA RHATANY.

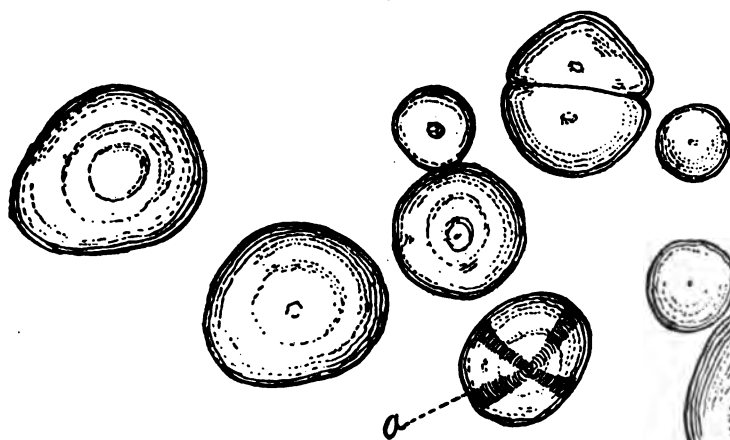


FIG. 6.—STARCH OF TEXAN RHATANY.

The starch of bryonia has spheroidal, or more commonly oblong, or more or less irregular grains, which often show fracture surfaces. The hilum is usually somewhat to one side of the center and often fissured

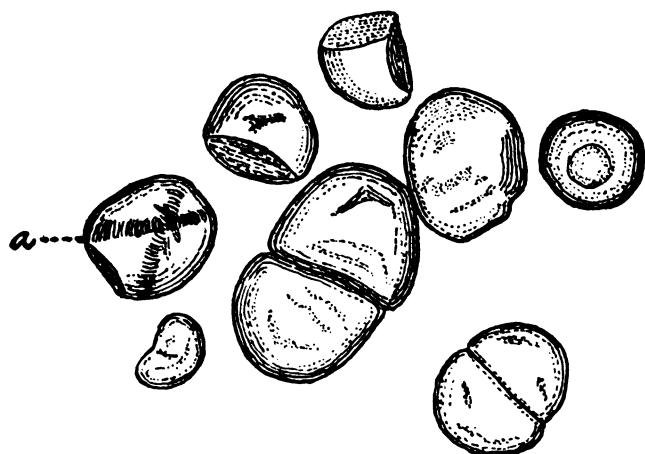


FIG. 7.—STARCH OF BRYONIA.

with two to three rayed fissures. Concentric markings few and indistinct, and not usually recognizable without the aid of a swelling reagent. (See Fig. 7.) *a* represents a single grain as it ordinarily appears when viewed between the crossed Nicols.

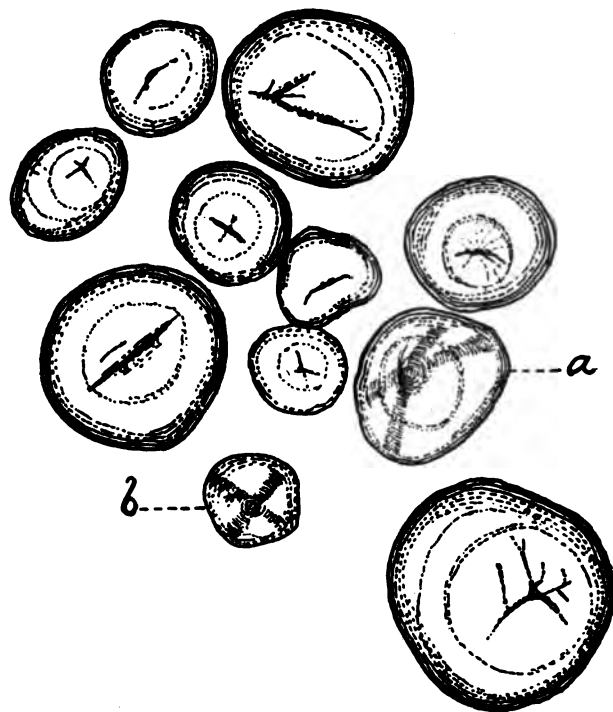


FIG. 8.—STARCH OF STILLINGIA.

Fig. 8 represents starch from the root of stillingia, in the cortex of which it exists in great abundance. The grains are rather large, spheroidal, smooth with a sub-central or central, usually conspicuously angularly fissured hilum, which is surrounded with from one to three concentric markings. These, however, are not always visible until the grains begin to swell under the action of caustic potash solution. *a* and *b* show grains as they appear between the crossed Nicols.

In Fig. 9 are shown typical starch grains from the root of phytolacca. They are rather large sized, mostly oblong or ovate, smooth grains with the hilum eccentric, and having usually conspicuous and often numerous fissures radiating from it. Sometimes these fissures are unbranching, sometimes branching, sometimes straight, but often curved. Other markings indistinct or none. *a* and *b* are grains viewed by polarized light. Angular, double and even treble grains are sometimes seen.

The starch grains of pareira are of various shapes, sometimes nearly spherical, sometimes lenticular, and not infrequently conical or mullar-shaped, as in *a*, Fig. 10. They are often double, treble or quadruple, or single ones appear with one or more flat faces, showing that they have been aggregated. The hilum is central or sub central, the larger grains, by treatment with potassic hydrate solution, showing concentric markings. The grains vary as greatly in size as in shape. The hilum is sometimes fissured with a single straight fissure, or else with several radiating ones.

In Fig. 11 are shown starch grains from the root of althæa, throughout which they exist in great abundance. In shape they are elongated, reniform or ovoid,

with the hilum usually located near one end, and often with a light line or band extending lengthwise of the grain through its center, as shown in *a*. This band is sometimes branched, as in *b*. Circular markings are indistinct, or none at all. The unequal-armed cross of polarization is shown in *c*.

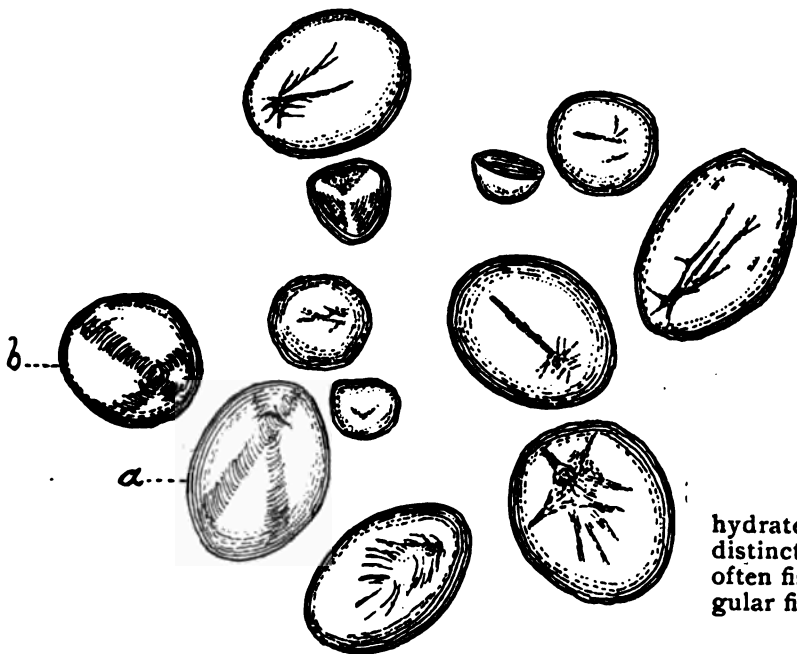


FIG. 9.—STARCH OF PHYTOLOCCA ROOT.

In Spanish and Russian licorice the starch grains are quite small and are not dissimilar. The grains of Spanish licorice are smooth, to the eye appearing homogeneous, swelling evenly or nearly so, with potassium hydrate solution, possessing no evident concentric markings, having a central or sub-central small and rounded hilum, which is rarely angularly fissured.

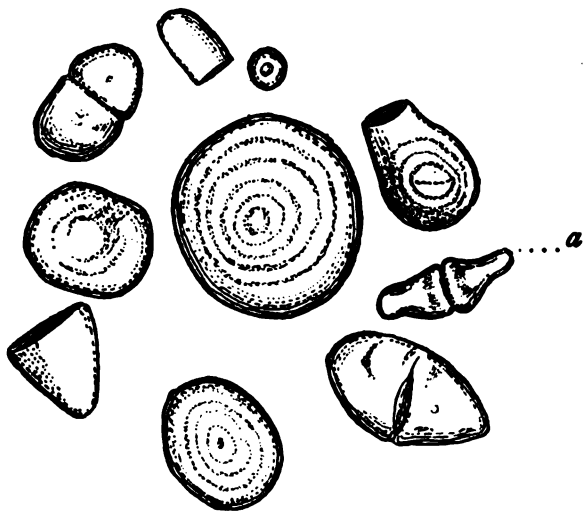


FIG. 10.—STARCH OF PAREIRA.

The grains are mostly spheroidal, or sometimes ellipsoidal or ovate, etc. (See Fig. 12.)

The grains of Russian licorice appear to average slightly larger, and to be less commonly elongated, but they are so similar to those of the common licorice that it seems doubtful if any characters in them can be relied upon for infallibly distinguishing the two drugs. Fig. 13 shows a collection of grains from the Russian species.

The cells of the cortex of ipecacuanha are heavily charged with spherical, oblong, hemispherical or somewhat angular starch grains. The grains are superficially smooth, have a central or sub-central hilum, but no concentric markings that are visible until the grains begin to swell under the action of potassium



FIG. 11.—STARCH OF ALTHÆA.

hydrate solution, and even then they are few and indistinct, or in many cases invisible. The grains are often fissured through the hilum with straight or angular fissures. (See Fig. 14.)

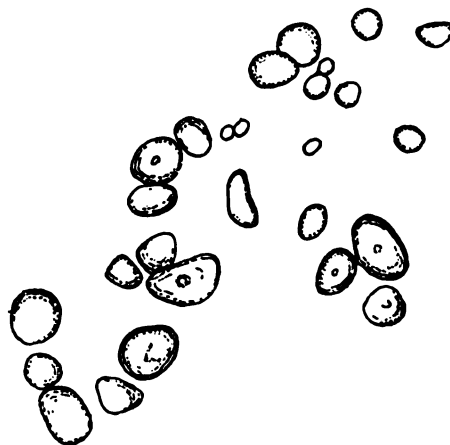


FIG. 12.—STARCH OF SPANISH LICORICE ROOT.

The starch of gelsemium occurs in the bark and medullary rays. The grains are small, spheroidal, or somewhat flattened, with a central or sub-central

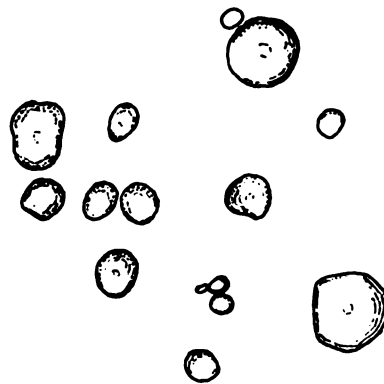


FIG. 13.—STARCH OF RUSSIAN LICORICE ROOT.

hilum, and with concentric markings frequently visible on the grains of larger size. These are but one or two in number usually, and not very distinct until the

grains begin to swell under the influence of potassium hydrate. A slight fissuring at the hilum is sometimes observable. (See Fig. 15.)

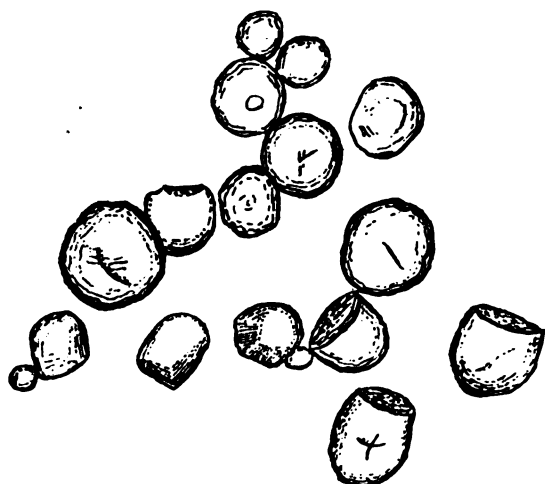


FIG. 14.—STARCH OF IPÊCACUANHA.

Calumba starch is quite large grained. The grains are circular, oval or ovoid in outline, not infrequently somewhat flattened or lenticular, having the hilum

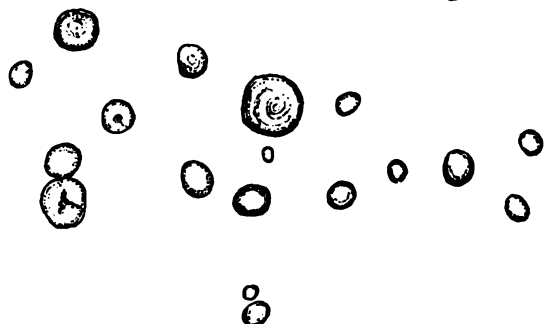


FIG. 15.—STARCH OF GELSEMIUM.

somewhat eccentric, as a usual thing, and showing one or more curved markings. The grains are superficially smooth and the hilum frequently conspicuously

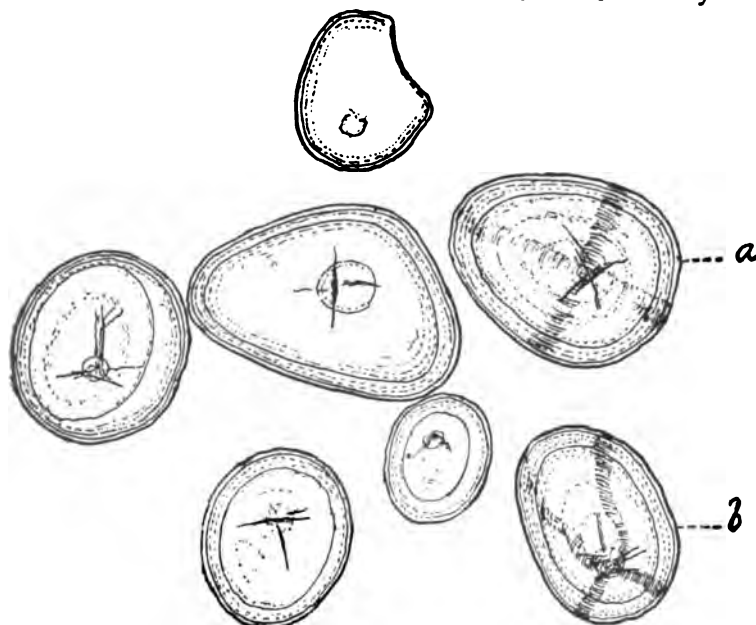


FIG. 16.—STARCH OF CALUMBA.

fissured in a radial manner. *a* and *b*, Fig. 16, show grains as they appear when seen by polarized light.

Fig. 17 shows a group of starch grains from the root

of belladonna. The grains may be described as spherical, prolately-spheroidal, or not infrequently double or hemispheroidal. The hilum is central or somewhat eccentric, and marked either by a small, dark, circular spot, or by faint, radiating, darkish lines. Concentric circular lines about hilum few and indistinct, even if treatment with potassium hydrate solution be resorted to. *a* is a grain as seen by polarized light.

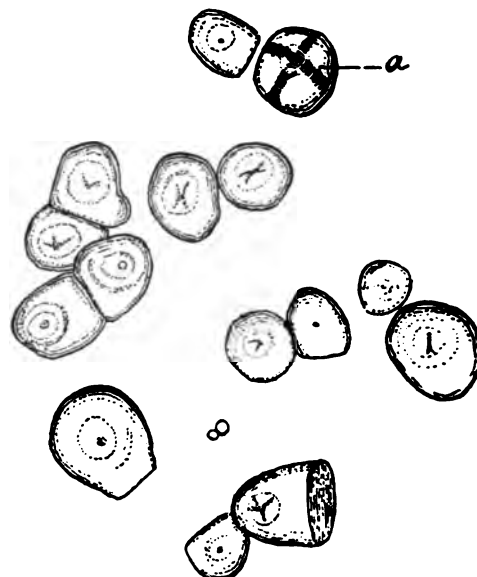


FIG. 17.—STARCH OF BELLADONNA ROOT.

The starch grains of sumbul are smooth, oblong, round or somewhat irregular, and often double. The hilum is central or sub-central, not infrequently fissured with a single straight fissure, or with a group of radiating ones. The one or two concentric circular



FIG. 18.—STARCH OF SUMBUL.

lines about the hilum are usually unrecognizable until a swelling reagent is employed. (See Fig. 18.)

Fig. 19 shows the starch of official rhubarb. It consists of rather small, rounded, but more or less irregular grains, having a central or sub-central hilum. The latter is sometimes angularly fissured, and the area about it is optically less dense than the peripheral region of the grain. Many of the grains are angular or many-sided from mutual pressure within the cell, but double or multiple grains are seldom seen. *a* is a grain as seen by polarized light.

The grains of rhapontic rhubarb, Fig. 20, appear to be smoother and to average somewhat smaller than those of the official species. The hilum is, also, so far as these observations have extended, more commonly fissured. The differences, however, between the two starches are not of a pronounced character, and further study is required, and the comparison of a large number of specimens before it can be stated with positiveness that these characters can be relied on for distinguishing the drugs.

*Rumex crispus*, although not distantly related to rhubarb, has starch grains of quite a different character. (See Fig. 21.) The grains are mostly smooth,



FIG. 19.—STARCH OF RHEUM.

much elongated, ellipsoidal, having a central or sub-central nucleus. Running lengthwise of them, along the center, is a darker streak; it is usually simple, but sometimes branching. The cross of polarization is extremely oblique, as shown in *a*.

In the root of *piper methysticum* the starch is abundant in the cortex and medullary rays. The grains are large, spherical or spheroidal, with the hilum cen-

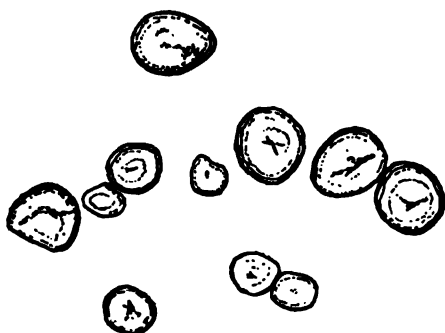


FIG. 20.—STARCH OF RHEUM RHAPONTICUM.

tral or somewhat eccentric, and in the larger grains usually distinctly radiately fissured. On the larger sized grains, also, one or more concentric markings are visible. Double grains are not infrequently found, but the majority are single. *a*, Fig. 22, shows a grain as seen by polarized light.

Fig. 23 shows a group of grains from the root of *asclepias*. The grains are small, rounded, sometimes double, treble or quadruple, with a central hilum, about which is an area optically less refractive than the peripheral portion of the grain. After the grains have begun to swell, under the action of potassium hy-

drate, or sometimes without the aid of any reagent, one concentric circle may be seen about the nucleus.

The starch of *symphytum* is illustrated in Fig. 24. It consists of small sized spherical or spheroidal grains, with a central, usually angularly fissured hilum, and

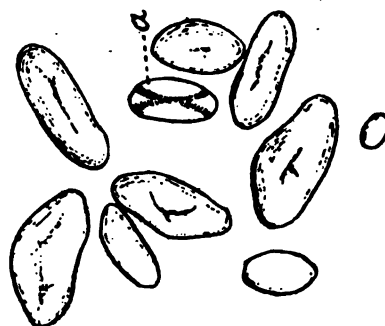


FIG. 21.—STARCH OF RUMEX CRISPUS.

showing but rarely any concentric markings. Double and hemispherical grains are not rare. The hilum and fissures are faint and often quite invisible until incipient swelling is produced by the action of potassium hydrate.

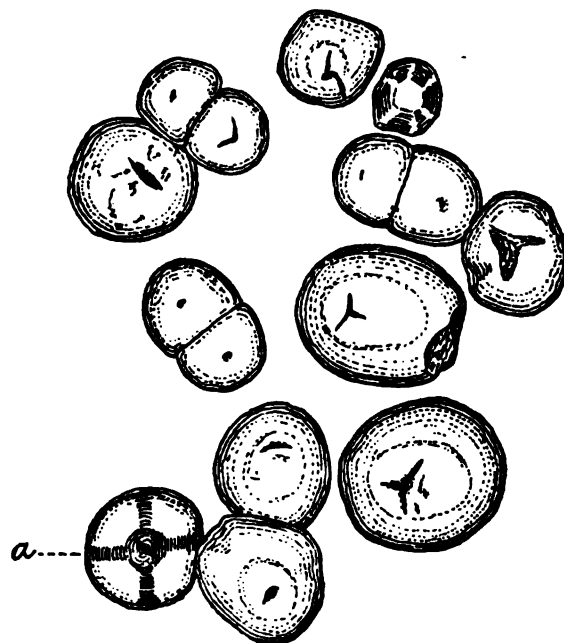


FIG. 22.—STARCH OF PIPER METHYSTICUM.

The starch of masterwort, Fig. 25, is quite small grained, and the grains are also usually spherical or spheroidal, with a central or sub-central hilum and faint concentric markings. The hilum is sometimes, though rarely, faintly fissured in a radial manner.

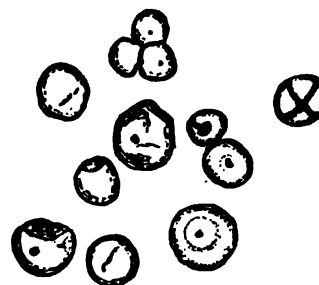


FIG. 23.—STARCH OF ASCLEPIAS.

The starch of *apocynum*, Fig. 26, is composed of medium-sized grains, which are occasionally nearly rounded, more commonly somewhat elongated, and

rarely very considerably elongated, as shown in *a*. In the smaller grains the hilum appears as a minute, round spot, at or near the center. In the larger, its



FIG. 24.—STARCH OF SYMPHYTUM.

position is usually marked by a dark, curved line. The double character of some of the elongated grains is

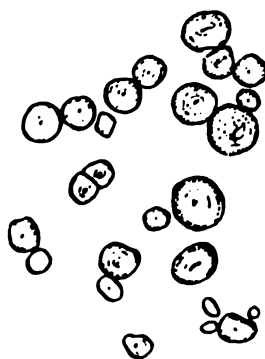


FIG. 25.—STARCH OF MASTERWORT.

shown by the polariscope. (See *a*.) Many of the grains are multiple, as shown in *b*.

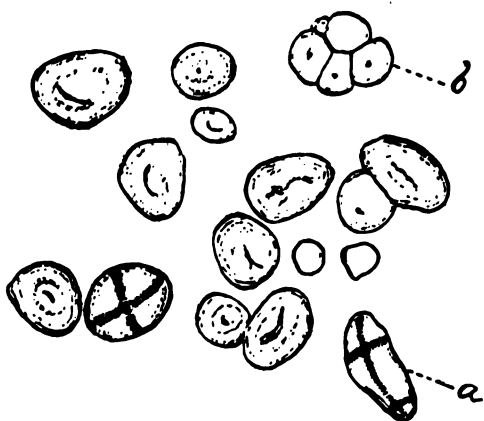


FIG. 26.—STARCH OF APOCYNUM.

#### Uniformity in Prescription Prices.\*

A paper recently appeared in the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD on this subject. We reproduce it in this issue of the *Review*.

It is doubtless a subject in which both the pharmacist and the public are interested.

The arguments of the writer of the paper referred to are not without weight, but we do not believe that even

an approximately uniform price-scale for prescriptions could be decided upon.

The trade of each pharmacy, both in quantity and quality, must of necessity govern the prices charged for prescriptions, and the conditions as to rent and kindred expenses of each pharmacy will naturally be taken into consideration.

Not only do these conditions differ in different sections of our country, but the differences are frequently as great in different localities of the same city or State.

The writer has made this observation from many years of personal identification with pharmacy in various sections of the United States, from the Atlantic to the Pacific coast. His experience strengthens the belief as above expressed, that a uniformity in prices suggested in the above mentioned paper, is not only impracticable but impossible, and that such a movement would not receive the support of one pharmacist in fifty.

It is doubtless well to have such a scale as suggested in each individual pharmacy for the guidance of the numerous employees of the establishment, each scale arranged according to the demands of the situation in each individual case. At the same time such scale would, in all probability, be absolutely worthless in another pharmacy but a few blocks distant.

The proposition that on all copies of a prescription given to customers the prices charged for the same be marked in plain figures, is certainly an excellent one. As a result of this, however, it is altogether likely that some unprincipled druggist would take advantage of the same by charging a lower price than previously paid in order to affect the confidence of his customer in the other pharmacist. As it is, if he is unable to ascertain the price previously charged, in compounding a prescription from the copy itself, it is the invariable custom to make a price so low that it will certainly be under that charged for the original.

Of the two evils we should prefer the former, as there would be an opportunity for pharmacists who desire to do so to protect each other, and at the same time secure a satisfactory price for such prescription.

**Differentiation Between Piperazin and Albumen in Urine.**—Some time since it was announced by Dr. Roerig that the appearance of albumen in the urine followed the administration of piperazin. Dr. Biesen-thal states (*Therap. Monatsheft*) that this is incorrect, the error arising from the fact that the supposed albumen precipitated by picric acid was in reality piperazin, itself precipitated as piperazin picrate. One part of piperazin dissolved in 20,000 of water yields a decided precipitate with picric acid. Within four hours after ingesting 1.5 grammes [22 grains] of piperazin, the precipitate thrown down by picric acid amounts to one-fifth of the volume of the acid used. Under the microscope this precipitate shows the characteristic six-sided groups of crystals. To further establish the identity of the piperazin picrate add hydrochloric acid to it, agitate the mixture with ether to remove the picric acid and add potassio-bismuth-iodide solution when the piperazin will form the characteristic microscopic double iodo bismuth salt. The piperazin can also be detected in the urine itself by first acidifying with hydrochloric acid and adding the potassio-iodo-bismuth iodide solution. Albumen may be detected in the presence of piperazin by the use of acetic acid for instance. In acidified urine albumen coagulates and the coagulum is permanent in either heat or cold; while the crystalline precipitate of piperazin picrate disappears on heating to reappear on cooling.

\*Editorial in *The Pacific Drug Review*, August, 1897.

# Pharmaceutical Progress

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**Iodoform-salol** is a solution of iodoform in melted salol, which crystallizes on cooling. It has been used by Reynier and Wall (*Therap. Blätter*, 1893, 233) as a disinfectant for injection into fistulous processes and suppurating cavities.

**Spiegler's albumen reagent** has been modified so that it is even a more delicate test for albumen, detecting 1 in 350,000. Its composition: Mercuric chloride, 2.0; tartaric acid, 1.0; distilled water, 50.0, and glycerin, 5.0.—*Pharm. Centralhalle*, 1893, 424.

**Preservation of Eggs.**—A writer in the *Apotheker Zeitung* states that he finds it possible to preserve eggs in a fresh condition by packing them in shavings in a stone vessel and filling up the vessel with paraffin oil. Eggs so treated were found perfectly fresh after being immersed for several months.

**How to Use Wood Tar.**—Dr. Ed. Stern advises (*Therap. Monat.*) that, before using, wood tar be allowed to stand for several weeks and that the upper two-thirds, which will be found lighter, be poured off and used for making spirit of tar, etc. He claims that it is much the more valuable portion.

**Reduction of Zinc in the Wet Way.**—Crude zinc oxide is boiled in a concentrated solution of magnesium chloride under a pressure of 2 to 3 atmospheres, and the solution then electrolysed. The free zinc precipitates and the magnesium oxychloride formed is dissolved in hydrochloric acid and used again (*Industrie Blätter*).

**Solution of Salicylic Acid.**—M. Jaudon prepares a concentrated solution of this acid by dissolving eight grammes in twenty-four grammes of alcohol of 90° strength. He then dissolves four grammes of borax in eight of neutral glycerin, mixes the two solutions, and adds sufficient distilled water to make one hundred grammes. An eight per cent. solution of the acid is thus obtained (*Rép. de pharm.* [3], v., 341).

**Effect of Senna and Rhubarb on Urine Tests.**—Jung has noted (*Pharm. Zeit.*) that after the ingestion of rhubarb or senna the urine gives the bismuth reaction for sugar. In the *Pharmaceutische Centralhalle* it is stated that urine passed after the administration of rhubarb reduces both Nylander's and Knapp's solutions and decolorizes Fehling's solution without causing precipitation.

**New Process for Saccharated Oxide of Iron.**—The following is proposed by Keutmann (*Int. Pharm. General Ans*): Dissolve ferrous sulphate in water, precipitate with diluted ammonia water, having the bottle filled to the stopper. Stop tightly and allow to settle; draw off the supernatant water by means of a siphon and fill immediately with hot water, repeating the operation until the wash water no longer gives a sulphate reaction. Then place the precipitate in a porcelain dish containing the pulverized sugar, warm, add a small quantity of alkali and oxidize the ferrous oxide with hydrogen peroxide.

**As Antidote for Hypochlorites**, such as Javelle water, Labbaraque's solution, etc., Carles (*Therap. Blätter*) recommends solutions of neutral sodium sulphite or hyposulphite. Ammonium chloride or sulphate also decompose hypochlorites at the temperature of the body. In case of these salts not being obtainable Carles recommends that the patient drink urine, the urates in which act as an antidote to the hypochlorites.

**Papain.**—It is found by Sittman (*Münch. med. Woch.*) that one centigramme of papain suffices to change ten grammes of coagulated white of egg, mixed with one hundred c.c of water at a temperature of 40° to 45°, into an opalescent milky fluid in the course of two hours, no free albumen remaining. The action is the same, whether the medium be alkaline or faintly acid. Taken in doses of from three to five centigrammes, made into a thin paste, directly after each meal, when the large proportion of albuminous matter was consumed, cessation of pain is said to have been caused in acute gastritis after two or three doses.

**Nature of the Staining Process of Vegetable Tissues.**—It has long been a matter of controversy whether the coloring of cellulose fibers by staining reagents is dependent on a chemical process or merely on a mechanical union of the particles of the pigment with those of the cellulose. Herr G. Spohn has attempted to set this question at rest by a careful microscopical examination of cotton-wool stained by mineral pigments. He found no change whatever in the structure of the fiber itself. Even when the fibers were macerated before staining with alizarin, they acted simply as a carrier of the pigment, on which the macerating fluid acts chemically. In all cases, according to these observations, the combination of the pigment with the fiber depends entirely on purely mechanical causes (*Dingler's Polytechn. Journ.*, 1893, Heft 9. Through *Pharm. Journ.*).

**Determination of Diastase in the Leaves and Stems of Plants.**—While the majority of physiologists believe that the conversion of starch into sugar is always the result of the action of a diastase ferment, Professor Wortmann has maintained the contrary. M. St. Jentys now attempts to explain the failure of Wortmann to find diastase in the aqueous extract of leaves and stems on the following grounds. It is probable, he considers, that the diastase is formed only in small quantities, as it is required for the conversion of starch into sugar. The presence of tannin in the aqueous extract causes the precipitation of the starch, which is then acted on only with great difficulty by diastase, and the tannin also precipitates the diastase itself. Finally, diastase possesses only a very feeble power of diffusion, and therefore, when contained within cells, only passes into the solution after the complete destruction of the cell-walls, and in company with the tannins, which then precipitate it (*Verhandl. Akad. Wiss. Krakau*, 1893, 47 pp. Through *Pharm. Journ.*).

**Oleum Terebinthinæ.**—Chas. T. P. Fennell, in a paper presented at the American Pharmaceutical Association meeting, after quoting the pharmacopœial requirements, says that neither the specific gravity, the flash test, nor qualitative tests for usual impurities are of much value because of the ingenuity and variety of adulterations. The most satisfactory results are obtained by fractional distillation and examination of the color, odor, density, etc., of the fractions. The only constant factor for purity is the boiling point, the pure oil boiling between 156° and 162°C., and distilling completely below 180°C. For a general practical test the following is recommended: Float a watch crystal containing 5 c.c. of turpentine upon boiling hot water for fifteen minutes; a ponderable residue indicates impurity, which may be resin, petroleum or paraffin oils.

**Testing of Cocaine Hydrochloride.**—One of the most useful means of identifying and ascertaining the purity of alkaloids and their salts is the melting point, and in the case of cocaine salts it is especially useful. There are, however, great discrepancies in the statements to be found in various works. Thus, for instance, the melting point of cocaine hydrochloride is given as 181°.5 C. in the Italian Pharmacopœia, as well as by Beilstein and in Schmidt's "Pharmaceutical Chemistry." In Watts' "Dictionary" the melting point of this salt is said to vary between 181° and 185° C. Hesse gives 185°–186° (*Pharm. Journ.*, [3], xxi., 1,110). In a paper read at a meeting of the Berlin Pharmaceutical Society, Dr. Kinzel has recently expressed the opinion that all these data are too low for pure cocaine hydrochloride, and that a well purified cocaine hydrochloride should have a melting point of from 201° to 202° C. This is so very much in excess of any previous observations that there is reason to think the statement must be due to some mistake, or that the numbers given are misprints.—(*Pharm. Centralh.*, xiv., 38. Through *Pharm. Jour.*)

**To Coat Pills with Salol.**—It has occurred to Dr. G. Oeder independently of the prior suggestions of Ceppi and of Yvou, that salol would be a good coating for pills intended to act on the bowels alone and not in the stomach. He recommends the following method of procedure: Place in a corner of a shallow dish with walls not too thick, such, for instance, as an enameled iron developing tray or a shallow evaporating dish; about 1 to 1.5 grammes (15 to 23 grains) of salol. Warm the entire bottom of the vessel gently and at 40° C. the salol will form an obaginous colorless fluid. Still holding the vessel over the flame throw thirty of the pills to be coated into the melted salol. This is done before removing from the flame so as to prevent the sudden chilling and consequent crystallization of the salol. Now remove and roll the pills about rapidly in the vessel blowing on them the while, and preventing their sticking together by the rapid agitation of the vessel. In about a minute or less the salol will be firmly attached to the pills. If the coating is not thick enough the process may be repeated. Ordinarily for pills of the usual size 0.6 gramme (9 grains) of salol are sufficient coating for 30 pills, the amount of coating being determined by weighing the pills before and after coating them.

**The Detection of Alkalies in Cacao.**—The several alkalies are used by different manufacturers to render their cacao preparations soluble, hence the determination of their presence is of interest. Stutz states (*Zeitschrift für Aug. Chemie*) that pure cacao has a small proportion of ash which does not effervesce on the addition of an acid. An addition of soda or of potassa will be indicated by strong effervescence. The

aqueous extract of pure cacao contains about one-third of the quantity of the total ash of the cacao. If fixed alkalies have been added, they will be extracted in the water and raise the percentage of ash contained therein. Pure cacaos contain less than 0.1 per cent. of nitrogen as ammonia. If ammonium carbonate has been used in the manufacture, it will be found to contain more than 0.25 per cent. of nitrogen as ammonia. To examine cacao powder for ammonia, ten grammes are placed in an Erlenmeyer flask of about 750 cubic centimeters' capacity, 200 cubic centimeters of water, and a sufficient quantity of burned magnesia added. This mixture is boiled for twenty minutes, and the vapor is received in titrated sulphuric acid.

**Papoid in Consumption.**—Dr. E. A. Wood, writing in *The Pittsburgh Medical Review*, says he has employed papoid in ozena, ulcers of the larynx, and in ulcers and cavities in phthisis pulmonalis. He used the drug, first by insufflation, but latterly by using the glycerole of papoid by the atomizer. Since the eight months of trial he states that he has been more and more convinced of its efficiency in the lesions named.

The treatment followed is: 1st. Bromide of gold and arsenic internally, ten drops in water before meals. 2d. Depress the tongue that the spray of papoid may thoroughly reach all parts of the larynx. 3d. Cause the patient to breathe deeply that the drug may reach all parts of the bronchioles. 4th. Employ the spray for at least ten minutes at each sitting. 5th. Use the spray morning and evening.

If there is no ulcer the papoid can do no good used as a spray. To obtain the best results the glycerole should be diluted with an equal amount of alcohol.

When papoid is used as a digestive ferment in cases of consumption where there is debility, weak digestion, and the suspicion of congested mucous patches, the drug should not be given in concentrated form, lest it dissolve the weakened tissues. In that case incorporate the papoid with the food before it is eaten. Sometimes it is better to partially prepeptonize the food.

**Paraffinum Molle.**—There has always been considerable mystery as to the origin of vaseline and similar preparations of petroleum, especially in regard to what the "residues" are from which they are made. Professor S. P. Sadtler, of the Philadelphia College of Pharmacy, in his article on American petroleum contributed to Thorpe's Dictionary of Technical Chemistry, throws light on the matter. The residues in question are what remains in the still after the burning oils, or lighter fractions, are distilled off *in vacuo* without cracking. By "cracking" is meant the process in which the heavy oils are distilled at a high temperature, the condensed vapor being returned again to the still. In this process the heavy oils are split up, and a larger yield of burning oil is obtained. Distillation *in vacuo* is carried out by the use of superheated steam instead of direct firing. The heavy or reduced oils thereby obtained as a residuum are either brought into the market at once without further treatment, or after a bone-black filtration. This production of filtered oils is usually combined with the manufacture of vaseline or of petrolatum, as it is now known in the U. S. Pharmacopœia. Taking a vacuum residuum as the raw material, this is melted and run on to filters of fine granular well-dried bone-black. The filters are either steam-jacketed or are placed in rooms heated by steam-coils to 120°F. or higher. The first runnings are colorless; and all up to a certain grade of color go to the manufacture of vaseline. Beyond that the filtrate is known as "filtered cylinder-oil" and is used as a lubricant exclusively.—*Chemist and Druggist*.

**Papain.\***

BY FREDERICK DAVIS, B.Sc.

Papain is the active principle of the *Carica papaya* or papaw tree. This plant, a native of South America, West Indies, and other parts enjoying a tropical temperature, I am informed by Mr. Jackson, A. L. S., of Kew, varies in height from five to twenty feet, according to age. It is of an herbaceous character, and when well founded bears a plentiful and continuous supply of fruit.

The cylindrical trunk is simple, and bears at the summit a tuft of palmately lobed leaves.

The stamiferous flowers are arranged in a racemose manner, whilst the pistillate flowers are for the most part sessile.

The plant is dioecious, belonging to the Passifloræ. The trunk and leaves abound in a milky juice, which possesses the power of rendering the toughest meat tender in a very short period of time.

The fruit termed the "papaw" is employed by the natives in a variety of ways, in its unripe state being boiled and used as a vegetable, and in its ripe state eaten as dessert. The leaves are used in washing in the place of soap. Papain may be prepared from the juice of the plant by treating with alcohol, dehydrating the resulting precipitate and extracting with water, preferably at a temperature from 36° to 40° C. The commercial varieties differ largely, not only in color and appearance, but to a great extent in proteolytic action. The color varies from light brown to nearly white, and I have observed generally the more nearly colorless the sample the greater its activity. Papain is an albuminoid body, but differs from peptones in the fact of not yielding a precipitate with either acetate of lead or perchloride of mercury.

As previously stated the commercial samples of papain vary considerably. I therefore considered it necessary to subject some of these to dialysis, thus obtaining the active principle in a fairly pure state. It may be on this account that past researchers obtained such varying and conflicting results.

If a larger quantity of water be employed in experimenting with the same quantity of papain and dried fibrin or albumen, it will be found to influence the final results very markedly, also that with a larger quantity of water, a smaller quantity of the same sample of papain and the same quantity of fibrin a different digestive result is arrived at, the temperature being maintained throughout at 35° C.

Albumen was employed in the following instances, being more reliable for experimental purposes than dried fibrin.

**EXPERIMENT NO. I.**

|                       |           |
|-----------------------|-----------|
| Albumen .....         | 3 grammes |
| Papain .....          | .3 gramme |
| Distilled water ..... | 50 c.c.   |

Digested 38 hours at 35° C.

**NEUTRAL SOLUTION.**

Result:

|                |       |
|----------------|-------|
| Digested ..... | 1.785 |
| Residue .....  | 1.815 |

**EXPERIMENT NO. II.**

|                       |            |
|-----------------------|------------|
| Albumen .....         | 3 grammes  |
| Papain .....          | .25 gramme |
| Distilled water ..... | 100 c.c.   |

Digested 48 hours at 35° C.

**NEUTRAL SOLUTION.**

Result:

|                |       |
|----------------|-------|
| Digested ..... | 1.935 |
| Residue .....  | 1.065 |

**EXPERIMENT NO. III.**

|                         |                  |
|-------------------------|------------------|
| Albumen .....           | 3 grammes        |
| Papain .....            | .3 gramme        |
| Hydrochloric acid ..... | (.005 per cent.) |
| Water to .....          | 500 c.c.         |

Digested 48 hours. Temperature 35° C.

Result:

|                |       |
|----------------|-------|
| Digested ..... | 2.005 |
| Residue .....  | .995  |

**EXPERIMENT NO. IV.**

|                         |                  |
|-------------------------|------------------|
| Albumen .....           | 3 grammes        |
| Papain .....            | .3 gramme        |
| Hydrochloric acid ..... | (.050 per cent.) |
| Water .....             | 500 c.c.         |

Digested 48 hours. Temperature 35° C.

Result:

|                |           |
|----------------|-----------|
| Digested ..... | N ne      |
| Residue .....  | 3 grammes |

With a higher percentage of acid the results compare with the last experiment, namely, no conversion into peptones whatever. The presence or absence of peptones was ascertained by the copper test. With regard to digestion in alkaline solution, papain is found to increase in proteolytic action if the alkalinity is not above 0.25 per cent., carbonate of soda being employed for the purpose.

**EXPERIMENT, NO. V.**

|                        |                  |
|------------------------|------------------|
| Albumen .....          | 3 grammes        |
| Papain .....           | .3 gramme        |
| Sodium carbonate ..... | (0.25 per cent.) |
| Water .....            | 100 c.c.         |

Digested 48 hours. Temperature 35° C.

Result:

|                |       |
|----------------|-------|
| Digested ..... | 2.358 |
| Residue .....  | .642  |

**EXPERIMENT NO. VI.**

|                        |                  |
|------------------------|------------------|
| Albumen .....          | 1 gramme         |
| Papain .....           | .3 gramme        |
| Sodium carbonate ..... | (0.50 per cent.) |
| Water .....            | 500 c.c.         |

Digested 48 hours. Temperature 35° C.

Result:

|                |       |
|----------------|-------|
| Digested ..... | 2.507 |
| Residue .....  | .493  |

Digestion takes place in media containing a much larger percentage of sodium carbonate, but in no way approaching the above results. The action of papain with milk is in every respect in ratio with the foregoing results, but the fat is not in any way emulsified, excepting of course to the extent of the alkalinity of the medium. Recapitulating we find papain to be active as a digestive in neutral and weakly alkaline media, but its action entirely stopped by the presence of .050 per cent. of hydrochloric acid.

Statements have been made that "papain" is capable of digesting living tissue and an experiment is quoted in Christy's "New Commercial Plants and Drugs" (No. 8) where Professor Finkler says he found certain preparations of papain to dissolve living frogs and worms. I have experimented largely in this direction and can say positively the frogs were in no case digested; death occurred, and the amphibian decomposed, but no peptones were formed. In fact the acid developed in the dermis of the frog is sufficient to prevent the action of papain. Papain appears to act as a poison to the frog. The creature will not live for long in a solution of papain, but decomposition certainly does not take place until after the death of the animal. I think, therefore, nothing further need be said upon this point.

With regard to the products of fermentation by the action of papain upon proteids, I have found undoubtedly a resemblance to that of trypsin, and by following

\* Read before the British Pharmaceutical Conference, Nottingham, 1893.\*

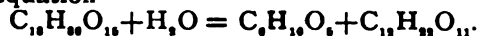
the suggestions of Dr. Sidney Martin, of University College, proved positively the formation of various amido-acids, tyrosine, and leucine, and by further decomposition indol was produced.

In conclusion I have to thank not only Dr. Sidney Martin for most valuable suggestions, but also Messrs. Christy and B. Kühn for samples of papain and specimens of the fruits.

### The Determination of the Action of Diastase on Starch.\*

By D. B. DOTT, F.R.S.E.

The action of diastase on starch is employed analytically for two purposes: (1) the determination of diastase (or rather of diastasic power, as the molecular weight of diastase is unknown) and (2) the determination of starch. For the former purpose it is most usual to allow a known weight of the diastasic solution to act on a known amount of starch paste at a certain temperature until the mixture ceases to give a blue color with iodine; while for the second purpose it is customary after a similar operation to determine, by means of Fehling's solution, the amount of sugar formed, it having been ascertained that for a particular temperature the proportions of sugar and dextrin are practically constant. The work of C. O'Sullivan in this department is specially well known. He found that by the action of diastase on starch solution at the temperature of 63° C. the starch was apparently entirely converted into maltose and dextrin, according to the equation—



The same proportions are formed at temperatures near 63°, but for much lower or higher temperatures the equation varies. Wherefore it might fairly be assumed that by acting on starch solution with diastasic solution at 60°–65° for a certain time the diastase strength would be correctly estimated by determining the amount of maltose formed. Two objections occur to the use of the iodine method: (1) it would be difficult to make sure that the starch solution was homogeneous throughout, and so long as any particles remained unconverted by the diastase the blue color would be developed by iodine; (2) that the end reaction with iodine is not very sharp, the blue color passing to violet and the latter changing to red-brown which in turn gradually disappears. On the other hand the reaction of maltose with Fehling's solution is well defined, so that, *ceteris paribus*, the determination of the quantity of maltose formed would seem the best way of determining diastase.

The experiments next described may help to elucidate the question.

1. The starch solution was in this, as in other cases, prepared by heating 20 grammes of arrowroot with 800 c.c. of water, and diluting to one liter. The starch is probably only in a state of quasi solution, not in true solution; the same holding good of other colloid bodies. The malt extract solution was prepared by dissolving and diluting 5 grammes of extract to 100 c.c.; 5 c.c. of this solution were allowed to react with 400 c.c. of the starch solution for half an hour at 55°–58° C., 10 c.c. of strong soda solution being then added, and the whole diluted to 500 c.c. This was then added to 10 c.c. of boiling Fehling's solution, and the amount required to completely reduce noted; 21.5 c.c. were required.

2. The same experiment was repeated, using the

same starch solution. The amount required to reduce was again found to be 21.5 c.c.

3. The same experiment was performed, but in place of starch solution, which had been heated just sufficiently to gelatinize, the starch solution was boiled for forty minutes. The amount of extract solution required to reduce was 39.0 c.c.

4. In this experiment a fresh malt extract was used, and the starch gelatinized at 93°–95° C. The test was made with the freshly prepared starch paste. Amount required to reduce the copper solution was 33.0 c.c.

5. Identical with No. 4, except that the starch solution prepared at 93°–95° was kept for forty-eight hours before use. The amount required to reduce was 42.5 c.c.

6. Malt extract solution prepared and experiment conducted as before described, and the starch solution prepared at 90°–95° C. Required to reduce Fehling's solution, 36.0 c.c.

7. Same in all respects, except that only half the quantity of extract was used in the reaction. Required to reduce, 73.5 c.c.

8. Same as experiment No. 6, but in this case the starch solution was boiled for twenty minutes. It required to reduce the Fehling, 57.0 c.c.

9. 125 c.c. of starch solution, as in No. 6, was digested at 38° C. (100° F.) with 5 c.c. of the extract solution, and the point noted when it ceased to give any distinct color with iodine. Time required was thirty-four minutes.

10. Same as No. 9, except that the starch solution of No. 8 experiment was employed. Time required was thirty-three minutes.

11. 125 c.c. of starch solution was digested with 5 c.c. of the extract solution at about 57° C. until no reaction was given by iodine. Time required was fifteen minutes.

12. Same experiment as No. 11, but digestion was conducted at a temperature of 36°–38° C. Time required was about thirty minutes.

Other experiments were tried, but it would only complicate the question to give further details. The experiments No. 1 and No. 2 show that when the same starch solution is employed, the results obtained by estimating the maltose are constant. The experiments Nos. 2, 3, 6, and 8 show that serious variations are caused in the amounts of maltose indicated, by the use of starch solutions prepared in different ways; the general rule being that when the starch solution has been well boiled, the amount of maltose indicated is much less than when the starch solution has been prepared at a temperature just under boiling. It may be noted here that the starch solution, even when fully boiling, did not attain the temperature of 100°, but only 98° (uncorrected). The experiments Nos. 6 and 7 show that the mass of diastasic matter employed does not appreciably affect the result (within limits at least) when excess of starch is present. The experiments Nos. 9 and 10 indicate that the iodine method gives practically concurrent results, whether the starch has been gelatinized at the higher or lower temperature. These results would seem to show that a slightly boiled starch solution favors the formation of maltose, while a thoroughly boiled solution favors the formation of dextrin. The experiments 11 and 12 confirm what has been previously stated as to the more rapid hydrolysis of the starch at the higher temperature, and show the importance of giving the conditions of experiment, when stating the diastasic value of a malt extract.

The general conclusions are:

1. That the diastasic value cannot be accurately determined by the amount of maltose formed, unless

\* Read before the British Pharmaceutical Conference, Nottingham, 1891.

the starch solution is always prepared in the same way.

2. That there would be great difficulty in fixing a standard method for the preparation of starch solution, such as would insure a constant result with the same proportion of diastase.

3. That as the method of determining diastase by testing for unaltered starch and erythro-dextrin with iodine is not appreciably affected by the manner in which the starch has been gelatinized, that process must be regarded as the best at present known.

4. That by the action of malt extract on starch solution (2 per cent.) at 40° C., with 1 part of extract to 5 parts of arrowroot, the mixture should cease to give a distinct coloration with iodine after thirty minutes.

This result was obtained with the malt extract used in experiments 11 and 12, and is not an exceptional result for a good extract. In a recently published article the writer states that he had never found a liquid malt extract of any diastasic value. This does not accord with my experience, as I have on several occasions examined a liquid extract which had been kept for a considerable time, and yet maintained the diastasic power given above as being indicated by a good extract of malt.

Mr. Grierson said he had listened with much interest to this paper, and if he had gathered its tenor aright, Mr. Dott appeared to have altered his mind as to the best method of determining the diastasic action of malt extract. Last year when he read a paper on this subject, he questioned the reliability of the iodine method, and considered that the best method was to determine the amount of maltose formed, but now he seemed to intimate that the iodine method was the most reliable. He said that thirty minutes was the time required for malt extract to convert its own weight of starch, but with good malt extracts he considered ten minutes was quite sufficient, and he had examined many in which the process was accomplished in five minutes. He saw no difficulty in getting an homogeneous starch solution when working with small quantities such as were used in these experiments. But the kind of starch was most important, and with arrowroot starch a good malt extract ought to convert its own weight in not more than ten minutes. He could corroborate the author's statement that there were many fluid malts in the market which were very active.

#### Alphonse de Candolle.

The passing away of this famous naturalist receives sympathetic notice in *Nature*.

Alphonse Louis Pierre Pyramus de Candolle, to give him his full name, died on April 4 at his house in the Cour de St. Pierre at Geneva, in the eighty-seventh year of his age. His death in a manner closes an epoch. With him passes away the last great representative of the French school of botanical taxonomy—to which, through Bentham, the English was in a great measure affiliated—and which had its root in Lamarck, whom the world in general scarcely realizes as a botanist.

Geneva has long been remarkable as the home of a number of families whose members have cultivated science with distinction. These are for the most part descendants of French Protestants who have emigrated from the south of France. Among these the de Candolles stand out in pre-eminence; the third generation still sees them in the front rank of the scientific world.

Alphonse de Candolle's father, Augustin Pyramus, was a man who would have been remarkable in any age. Gifted with astonishing energy and enthusiasm, a singular power of grasping and co-ordinating large masses of detail, his buoyant charm of manner inspired even the citizens of Geneva with interest and conviction in the supreme importance of taxonomic studies.

The facts to be told of Alphonse de Candolle's life are simple. Born October 27, 1806, at Paris, he took the degree of bachelor of science at Geneva in 1825, and of doctor of laws with great distinction in 1829. The influence of his legal training probably gave an impress to his work and character all through life. In 1831 he began to assist his father in his duties as professor of botany, and he succeeded him in the chair in 1835. He held it till 1850, when he left it, owing to political events. The remainder of his life he passed as a private man of science. But during middle life he fulfilled with dignity, and not without influence, the duties of a citizen which his character and social position in some sort imposed upon him. After serving as a member of the Representative Council of Geneva, he was a member of the Grand Council from 1862 to 1866. He was the first to advocate the "referendum" in political affairs; he exerted himself to effect numerous reforms in economic and sanitary matters; and by obtaining the use of postage stamps for his canton he appears to have paved the way for their general introduction into Switzerland.

The earliest and perhaps the best of de Candolle's botanical works is his monograph of the *Campanulaceae*, published in 1831. It has stood its ground more solidly than is often the case with the taxonomic work of the time, and its conclusions have been in the main adopted in the later revision of the order by Bentham and Hooker.

In early life the writings of Humboldt inspired de Candolle, as they have done many young men, with the impulse to travel. Family circumstances, however, forbade it. But the fascination of phyto-geographical problems had taken possession of him, and the vast assemblage of specific forms which continually passed through his hands must have supplied him with inexhaustible food for reflection.

In 1855 appeared his *Géographie botanique raisonnée*, which was the most important work of his life. It would be impossible in a short space to appreciate this justly. It has been complained that it led to no direct conclusion; and it is all but inexplicable that the author missed seeing that the immense mass of facts he had collected really pointed directly to evolution as the key to its explanation. But the character of the man is an element which must not be overlooked. Essentially in method a statistician, he believed these facts, properly marshaled, would evolve their own law. But scientific method, like other calculating machines, will not evolve more than is implicitly put into it. De Candolle, it must be admitted, neither possessed nor had much sympathy with that touch of imagination akin to inspiration, which by some unconscious cerebral integration sees an even wider principle underlying the facts which are contemplated than by any method of manipulation can be deduced from them. But it may be doubted whether a study of the distribution problem would ever have led to evolution directly. The essence of the Darwinian theory was the discovery of a possible, at any rate conceivable, *modus operandi*. This was the result of an attack from the biological side. The phenomena on a large scale which geographical distribution presents are too remote from their ultimate cause to immediately suggest it; yet when the principle is grasped they are immediately susceptible of deductive explanation.

In 1880 de Candolle published his *Phytographie*. This is a useful book, indispensable to the taxonomic workshop. It elaborates and enforces the admirable principles of plant descriptive work laid down by Linnæus, which make the study one of no small value as an educational discipline. The book will always have its value as keeping alive an admirable tradition.

Finally, in 1883, de Candolle published his "Origine des Plantes Cultivées." This sprang from his prefatory studies for the *Géographie*. It is an altogether admirable book; not perfect certainly, or complete, and faulty perhaps more especially in the difficult matter of handling the philological evidence.

De Candolle was a foreign member of the Royal Society of Great Britain, a gold medallist of the Linnæan Society, a D.C.L. of Oxford, and an LL.D. of Cambridge; and the possessor of the order which perhaps confers the greatest distinction on a scientific man, the "*pour le mérite*" of Prussia.

### The Chemistry of Ipecacuanha \*

By DR. B. H. PAUL AND A. J. COWNLEY.

Next to opium and cinchona bark, ipecacuanha is probably one of the most important drugs included in the official materia medica, but its chemical history is still very imperfect, and although some of its medicinal effects are ascribed to an alkaloid, there is considerable doubt whether that is always the case.

For several months past we have been engaged in the endeavor to devise a satisfactory method of extracting from ipecacuanha the alkaloid which has been regarded as the active principle of this drug, and to which the name of emetine has been applied; our object being to obtain such means of quantitative determination as could be relied upon when applied to the examination of different samples of the commercial drug or of its medicinal preparations. In prosecuting this inquiry reference has of course been made to the observations of previous experimenters; but instead of deriving much assistance from the published statements of their results, we have found that they lead to considerable uncertainty respecting the chemical identity of the substance. Thus, for instance, in the description of emetine given by Lefort,<sup>†</sup> it is stated to be very readily soluble in solutions of caustic soda or potash, and that in such solutions emetine rapidly undergoes alteration by absorbing oxygen from the atmosphere. We have found that this is not the case with the alkaloid supplied by Merck as pure emetine, or with that which we have ourselves obtained from ipecacuanha. Even on precipitating the base from solutions of its salts with caustic alkalis the precipitate formed is not dissolved again on adding an excess of caustic alkali. There are similar discrepancies between the statements as to the physical characters of the alkaloid of ipecacuanha. Most authorities describe it as being perfectly amorphous, some state that it is susceptible of crystallization, under certain conditions, while others again describe it, without any qualification, as having the form of "needles" <sup>‡</sup> or "crystals." <sup>§</sup> The statements as to the melting point of the alkaloid also differ considerably. In addition to these discordant statements, we have found, in experimenting with several samples of ipecacuanha, that the alkaloid is not homogeneous, but a mixture of two or more different substances.

Under these circumstances it appeared to be premature to attempt the determination of emetine, as a means of ascertaining the relative value of samples of ipecacuanha or of its medicinal preparations, and we

have therefore directed our attention to the general chemical examination of the alkaloid constituents of the drug as a necessary preliminary to the endeavor to devise some practically applicable method of valuation. This inquiry is not yet sufficiently advanced for the publication of the results as a whole; but some points which have been made out are of sufficient interest to be worth mention in anticipation of a more complete account.

From the examination of a number of different samples of ipecacuanha we have ascertained that the alkaloid existing in this drug is for the most part a perfectly amorphous substance, of marked alkalinity, forming definite neutral salts which are also amorphous, and, like the base they contain, uncrystallizable by any means we have been able to apply. Hence it would appear that the want of a simple method of obtaining crystallized emetine is likely to remain a constant quantity, and that, in point of fact, the determination of emetine is at the present time only approximately possible, inasmuch as the substance is unknown.

Further, we have found that this amorphous alkaloid is associated with others which are distinctly crystalline and very different from the amorphous alkaloid in physical characters. This fact we have established beyond doubt, and we are of opinion that it will serve to account for some of the discordant statements which have been made in regard to the alkaloid of ipecacuanha. Thus, for instance, it is stated by Kunz,\* as well as Lefort and Wurtz,<sup>†</sup> and Podwysotzki,<sup>‡</sup> that although the substance described by them as emetine was generally amorphous, they sometimes obtained the alkaloid in the form of distinctly crystalline needles, by rapid evaporation of an ether solution. On several occasions we have observed a similar formation of very delicate silky crystals when the ether solution of the alkaloid from ipecacuanha was left for some time. Sometimes the formation of these crystals took place in such a manner that the ether solution appeared to become quite solid; but on recrystallization from ether the apparently solid mass could be separated into an amorphous portion and a crystalline substance that was much less soluble and, in proportion as it was purified, was found to have a melting point of 90° to 98°C., which is very much higher than that given for emetine by any observer. Consequently the desideratum of crystallization, assumed to be necessary for the determination of emetine, would not, if it were attainable, suffice for that purpose, since other alkaloids are present which would still have to be separated in order to obtain definite results.

The crystalline alkaloid above referred to is very much less soluble in ether, chloroform, or benzene than the amorphous alkaloid with which it is associated; but, as is usual in such cases, it is not until separation has been carried to some considerable extent that this difference becomes apparent. The quantity of material disposed of in the operations of fractional crystallization or precipitation, requisite for separating the alkaloids, is so great that very little remains for further examination unless larger quantities are operated with than we have yet had at our disposal.

The stem of Brazilian ipecacuanha appears to contain a small amount of the same amorphous alkaloid that is present in the root; but it is accompanied by a distinctly crystalline alkaloid. It is very sparingly soluble in ether, but separates from the solution on slow evaporation in lemon-yellow transparent crystals melting above 100° C. When precipitated from the solution of a salt by ammonia, it rapidly assumes a

\* *The Pharmaceutical Journal and Transactions*, No. 1,304, p. 61.

<sup>†</sup> *Journal de Pharmacie* [4], ix., 244.

<sup>‡</sup> *Watts' Dictionary*, ii., 431.

<sup>§</sup> *Thorpe's Dictionary*, iii., 916.

\* *Archiv. der Pharmacie* [3], xxv., 465.

<sup>†</sup> *Comptes rendus*, 84, 1300, and *Annales de Chim. Phys.* [5], xii., 281.

<sup>‡</sup> *Pharmaceut. Zeitschrift für Russland*, xix., 1.

crystalline form, and on addition of caustic soda it is dissolved in the manner stated by Lefort (see *supra*). It forms a neutral hydrochloride which is amorphous, and the platinum salt appears to be readily decomposed.

This alkaloid is present in very much larger proportions, relatively to the amorphous alkaloid, than it is in the root. Consequently it follows that determinations of the amount of alkaloid, as a whole, in the stem will not correctly express the relations of stem and root in regard to the amount of emetine. Evidently no inference can be drawn from such determinations as to the relative values of those portions of the plant as medicinal agents. Before that can be done with any degree of certainty it will be necessary to find means of separating the alkaloids so that their several amounts may be ascertained, and to do that a knowledge of their characters must be obtained. With that object in view we are now engaged in preparing such quantities of the several alkaloids of ipecacuanha as will admit of their chemical characters being studied, so as to furnish data for their separation and identification, besides furnishing material for ascertaining their respective therapeutic effects. Meanwhile, however, it must be pointed out that, apart from the absence of official recognition, there is no ground whatever for the assumption that ipecacuanha stems possess properties which justify their admixture with the roots. So far as anything is known it points in the opposite direction.

Another point to which attention is being directed is the question as to the relative value of other kinds of ipecacuanha, such as, for instance, that of New Granada, which is said to be probably derived from a plant different from that which yields Brazilian ipecacuanha. This Carthagena root is stated to be equal to, if not better than, the Brazilian at the present time.<sup>§</sup> That opinion is based upon the amount of alkaloid that has been obtained from the Carthagena ipecacuanha, and in regard to that point we have found that there is little or no difference between the two kinds. It has been assumed that the alkaloid present in this root is the same as that contained in Brazilian ipecacuanha. There is no distinct chemical evidence that such is the case; but in the course of our experiments relating to this subject we have at least obtained evidence that Carthagena ipecacuanha contains, in addition to a considerable amount of amorphous alkaloid some proportion of another crystallizable alkaloid, which presents marked differences from the crystalline alkaloid of Brazilian ipecacuanha. Until the investigation of this material, in regard to the chemistry of its constituents and the therapeutic effects they produce, has been thoroughly carried out, and it shall have been shown that they are identical with those of the Brazilian drug, it would, however, be unjustifiable to advocate the substitution of the one for the other upon the ground of possible similarity of origin or of apparently analogous medicinal characters.

Before concluding it may be useful to refer to some of the opinions which have been expressed in regard to the striking absence of agreement between the data obtained in determinations of the alkaloid in ipecacuanha. Upon the basis of those data very dissimilar opinions have been expressed as to the amount of emetine in the drug. While some have taken one per cent. as the maximum, others have taken 1.6 as the minimum for a sample of good quality, and others again have insisted that nothing should be recognized as good which does not contain at least 2.5 per cent. Placing side by side with these differences the different experimental data obtained by various operators, which run through all

possible gradations between one and upward of three per cent., it is evident either that ipecacuanha root is a very variable drug, or that the experimental results must have been largely influenced by accidental circumstances. The methods adopted by different operators are generally supposed to be chiefly accountable for the differences in the results obtained, and the facts we have already established as to the existence of distinct alkaloids, in regard to which some solvents exercise a differentiating action, will perhaps help to account for some of the differences between experimental results previously obtained.

There are, however, other conditions the probable influence of which upon the analytical results may be traced. It has been assumed that emetine is destroyed by the action of heat, and hence the recommendation of cold extraction and evaporation at low temperatures. We have not found either of these precautions to be essential or of importance. The solvents used for extraction or to be evaporated in concentrating solutions, generally resemble ether in being of such a nature that no excessive heating need be feared in either of those operations. It is rather in the operation of "shaking out" that loss of alkaloid is likely to be caused, not by its destruction, but as a consequence of particles of the precipitated alkaloid being melted and thus rendered practically insoluble. The fact that the alkaloid becomes almost insoluble after being melted has been pointed out by Kunz, and as its melting point is so low there is great risk of loss in this way if the precipitation is too rapidly carried out. The assumed decomposing action of alkalies has been spoken of as causing low results; but that explanation is inconsistent with the fact, mentioned by Kunz, that emetine offers remarkable resistance to the action of alkalies. Altogether we are disposed to think that in the determination of alkaloid in ipecacuanha differences in experimental results are not due to the nature of the solvent employed for extraction or to the method of operating. It seems much more probable that such differences arise from the want of preserving, throughout the entire treatment, conditions which are suited to the characters of the material operated upon and of the substance to be obtained from it. This appears to be of much greater importance than strict adherence to a mere rule of thumb procedure.

| No.             | Total Mixed Alkaloids. |       |
|-----------------|------------------------|-------|
|                 | Root.                  | Stem. |
| 1.....          | 2.02                   | —     |
| 2.....          | 1.95                   | —     |
| 3.....          | 2.14                   | —     |
| 4, picked.....  | 2.12                   | —     |
| 5, picked.....  | —                      | 0.97  |
| 6.....          | 2.08                   | —     |
| 7.....          | 2.03                   | —     |
| 8, picked.....  | 2.28                   | —     |
| 9, picked.....  | —                      | 1.76  |
| 10.....         | 2.22                   | —     |
| 11, picked..... | —                      | 1.02  |
| Mean.....       | 2.11                   | 1.25  |

So far as we are in a position to form an opinion on the point above referred to, from the analytical examination of a comparatively small number of samples of ipecacuanha, we are inclined to the conclusion that the percentage amount of alkaloid in ipecacuanha root does not vary very much from 2 per cent., as shown by the results given in the foregoing table.

The picked samples consisted entirely of either root or stem respectively. The other samples of root were operated upon without separating any admixture of stem that might be present; but it was not in any case sufficient to affect the result very materially. Two of the samples of stem were carefully picked to separate any particles of root; but the other sample, No. 9, was found, after the analysis had been completed, to contain a considerable admixture of portions of root-bark, and that circumstance probably accounts for the higher amount of alkaloid obtained in that instance.

<sup>§</sup> *Ph. J.* [3], xxiii., 267, and Keller, *Ph. J.* [3], xxiii., 39.

## Medical Notes.

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**In Morphine Poisoning**, tincture of capsicum, in ounce doses, has been used with success. It is used undiluted in enemata and repeated as often as necessary. Stretching of the sphincter ani by means of the bivalve speculum, as often as respiration flags, has also been practiced.—*North Carolina Medical Journal*.

**For Tuberculosis.**—Picot (*Deutsche med. Wochenschr.*, 1893, No. 30, p. 731) recommends a mixture of guaiacol and iodoform in sterilized olive oil for injection in the treatment of tuberculosis. Every cubic centimeter (16 minims) contains 0.01 (0.15 grain) of iodoform and 0.05 (0.75 grain) of guaiacol. The mixture is clear; its injection occasions no pain, is free from danger, and is reputed to have produced the same results as tuberculin and other agents.

**Sulphate of Cinchonamine** is a new antipyretic which is said to have some valuable properties. Le Gendre and Beaussenat have employed it in a number of cases of erysipelas, giving it by hypodermic injection in doses of four and one-half to nine grains. In some instances the effect upon the fever was superior to that obtained by any other antipyretic drug; but in others it was nil, and it was found necessary to resort to cold baths. In two cases the drug caused epileptiform convulsions, an effect which has also been observed in experiments with it upon animals.—*Medical Record*.

**Acetic Ether** is recommended by B. Krautwig (*Centralbl. f. Klin.-Med.*) as a better stimulant than ether. It should be administered in doses of half a cubic centimeter subcutaneously, when it acts as well as camphor and better than ether itself. Acetic ether (*ethyl acetate*), so the author states, increases the respiration, the action of a dose not being evanescent, but reaching the height in from fifteen to thirty minutes and then gradually decreasing. A small dose of ether (0.8 c.c.) stimulates the respiration; a larger dose (1 c.c.) acts as a sedative; acetic ether, on the other hand, increases in stimulant action with the quantity given.

**To Control Hay Fever.**—A foreign scientist has observed that in the Winter a coryza was usually accompanied with hot ears, which regained their normal temperature when the discharge from the nose was established. He determined to try a reversed order of effect on the hay fever in the Summer, and began accordingly to rub his ears until they became red and hot.

It is now the third year that he has been able to lead an endurable existence during the hay fever season. As soon as the least sensation of fulness in the nose appears, there is recognized a certain amount of pallor in the ears. A thorough rubbing of the ears, at times, even to confusion, has always succeeded in freeing the nasal mucous membrane from its congestion. The rubbing, however, must be *thorough*, and repeated as often as the least symptom of congestion returns to the nose.

**The Human Body Used as a Medicament.**—The leaders of the late anti-foreign movement in China stirred up their emissaries to hatred of the foreign dwellers in their midst by various false accusations. Missionaries were charged with bewitching women and

children, and murdering them for the sake of their hearts and eyes. According to Dr. Macgowan, who has lived in China for years, these charges are far from preposterous; for in that country various portions of the human frame are credited with therapeutic properties. In the only Chinese authoritative materia medica thirty-seven remedies of the kind are given. Human blood, taken into the system from another, is thought to strengthen it. Of course, this idea is not purely Chinese, as Western medicine has its transfusion of the blood of others as a last resource in extreme hemorrhage. But other Chinese remedies are not elsewhere recognized as efficacious. Thus, human muscles are supposed to be a good remedy in consumption, and children mutilate themselves to administer their flesh to sick parents. This treatment, too, is especially frequent among the *literati*. A graduate, finding "the snipping of the skin from his own arm too painful, seized a hatchet and cut off a joint of one of his fingers, which he made into broth mixed with medicine, and gave to his mother." The recipient must be kept in absolute ignorance of the potion thus prepared, while the operation is never performed for an inferior, as by a husband for a wife, or by a parent for a child. There is, consequently, a demand for portions of the human body, which command a certain price; and this fact tempts men to murder others that they may obtain the money which will be paid for the portions in question.—*Medical Record*.

**Nitrate of Aconitine in Facial Erysipelas.**—Tison (*Sem. Méd.*, August 25, 1893) was first induced to use this remedy in 1888, and has employed it subsequently in every case of facial erysipelas which has come under his treatment. The results have been highly satisfactory, pain and other symptoms having been rapidly subdued, save in two instances, and in neither of these could the complications which arose be due to the treatment. Although the nitrate of aconitine is highly poisonous, and it may be objected to by some on this account, if used as now suggested the danger of untoward symptoms is very slight. The alkaloid is dissolved in a mixture of glycerin, alcohol, and distilled water, the mixture having the same specific gravity as water and containing 1 milligramme in 50 minims. Only 2 to 4 milligrammes are required in any one case. The method of procedure is as follows: According to the condition of the stomach, either an emetic or a purgative is administered, immediately after which nitrate of aconitine is given in a mixture containing 1 milligramme for the twenty hours dosage. The affected part is painted with a saturated ethereal solution of camphor, which acts as an excellent sedative. When all signs of inflammation have subsided the part is washed with a solution of lysol.

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### Some New Reactions for Albumin in the Urine.

The chemical and microscopical examination of the urine has long been regarded as an important means of diagnosis, and affords indications not only as to the interesting anomalies of tissue metamorphosis,

but of the pathological affections of particular organs.

It is well recognized that clinical examination must proceed *pari passu* with the microscopic examination, especially when the question to be solved is the differential diagnosis between diseases of the kidney and other affections. Albuminuria is not necessarily significant of disease of the kidney, for we find albumin in the urine when the kidneys are perfectly healthy (febrile albuminuria), or when the albumin comes from some portion of the urinary tract (spurious albuminuria).

In every case clinical examination, rapidly executed, to demonstrate the presence of albumin is valuable; for if, on repeated examination of the urine, negative results are obtained, we may exclude disease of the kidney. It is advisable to frequently repeat the analysis as in different affections of the kidney (atrophic kidney, amyloid degeneration), the albumin may for a time disappear.

Dr. C. Zouchlos reports in a recent issue of *Le Progrès Médical* the results of a series of experiments made by him in the clinical laboratory of Erlangen under the direction of Dr. Fleischer. Dr. Zouchlos confined his experiments to other reagents than those mentioned in M. Penzoldt's monograph "On the Old and New Tests for Albumen in the Urine and their Diagnostic Value."

**REACTION OF SULPHOCYANIDE OF POTASSIUM AND ACETIC ACID AT AN ORDINARY TEMPERATURE.**—Take 100 c.c. of a ten per cent. solution of sulphocyanide of potassium and 20 c.c. of acetic acid, and add a few drops to the urine to be examined. If it contain the smallest quantity of albumin a distinct cloudiness is at once obtained; if the urine contain much albumin a thick white precipitate is obtained. Any excess of the reagent has no effect. All normal urines, that is to say, such as are not affected by ferrocyanide of potassium and acetic acid, give negative results with this reagent. By successive dilutions of urine containing albumin he found that this reaction is more delicate than ferrocyanide of potassium and acetic acid. It possesses the advantage of being colorless, so that the least cloudiness is more manifest than when ferrocyanide of potassium is employed. The reagent employed by him has remained transparent even when long kept. If the sulphocyanide of potassium and the acetic acid be evaporated together a hygroscopic powder is obtained which does not give the albumen reaction. The former method must therefore be followed. Succinic acid may be substituted for the acetic acid. If to albuminous urine sulphocyanide of potassium and a little succinic acid be added a distinct cloudiness is obtained, while normal urine remains clear. He has been able to assure himself by a long series of experiments of the accuracy of this test.

This react on possesses the advantage of being easily carried about, the sulphocyanide of potassium and the succinic acid being solid. If these reagents be mixed in equal proportions, and a small portion of the mixture be added to albuminous urine, an immediate cloudiness results with the smallest quantity of albumen. Normal urine gives a negative result. If the pulverized mixture be inclosed in gelatin capsules and the air be excluded the reaction may be instantly obtained. (a) If exposed to the air the powder becomes humid. He is, therefore, of opinion that sulphocyanide of potassium and succinic acid is an admirable albumin test, and may in this form be conveniently carried about.

In the first place he evaporated in a water-bath at a medium temperature ferrocyanide of potassium and acetic acid. A powder is thus obtained which is hy-

groscopic and consequently cannot be employed. Finally, he made a mixture of ferrocyanide of potassium and acetic acid, and employed this solution as an albumin test, thus dispensing with the necessity of employing the two reagents separately. This solution did not prove advantageous, for it became green and opalescent and simulated the presence of small quantities of albumen in the urine. On the other hand we know that perchloride of mercury combined with acids precipitates albumin, and this fact led him to other experiments.

**REACTION OF ALBUMIN WITH PERCHLORIDE OF MERCURY AND ACETIC ACID.**—If a few drops of a ten per cent. solution of perchloride of mercury be added to albuminous urine a distinct cloudiness is obtained, while in normal urine the cloudiness is hardly visible, except in very exceptional cases. If to the urine so rendered cloudy by perchloride of mercury a few drops of acetic acid be added the precipitate disappears if it is not composed of albumin. On the contrary if the urine contain albumin, the precipitate persists. A mixture of one part of acetic acid and a ten per cent. solution of perchloride causes only a cloudiness when there is albumin in the urine; this appears immediately on the addition of the reagents and does not form a deposit, while the addition of the sublimate alone causes one. Peptones give no reaction with these agents in the proportions above indicated. The same applies to uric acid, urea, phosphates, and sugar. Further, very concentrated urine does not become cloudy on the addition of the sublimate and acetic acid.

### Neuralgia.\*

BY A WEST-END PHYSICIAN.

Now that the neuralgia season is again at hand, it may be worth while to review some questions relating to the nature and causes of that most troublesome complaint, and at the same time to take into consideration the best means of relieving it.

#### THE SYMPTOM OF NEURALGIA.

Unlike the majority of diseases, neuralgia has only one symptom, but for most people that one is quite enough. Milton must surely have had it in his mind, if not in his nerves, when he wrote—

But pain is perfect misery, the worst  
Of evils, and, excessive, overturns  
All patience.

Needless to say, every pain is not a neuralgia, and, indeed the pain of neuralgia is altogether peculiar—a pain *sui generis*. It is quite unlike the dull throbbing pain of inflammation or the depressing sickening pain of severe colic, or in short, any other of the many pains to which poor human flesh is heir. It is described by those who ought to know as sharp and piercing, and sometimes so agonizingly severe as to force an involuntary cry from the sufferer. Often it seems to shoot or flash from one point to another, and people who have studied their anatomy can easily distinguish that it follows the course of some nerve or nerves. The pain comes and goes; rising rapidly to its severest intensity and again as rapidly subsiding. The attacks may last from a few minutes to many hours, and after they pass off the patient is left with an inexpressible sense of utter weariness. The skin over the part is generally exquisitely tender for some time, and if it is the scalp that has been affected patches of the hair may turn white or even fall off. Such, then, shortly, are the chief characters of the disease, and we may now turn to

\*From *The Chemist and Druggist*.

## THE CAUSES OF NEURALGIA.

Neuralgia, it is said, is the first indication of an enfeebled nervous system, and that, in turn, may be due to very varied conditions, such as overwork, worry, dyspepsia, and so forth. These all bring about pretty much the same result. The body as a whole becomes depressed and badly nourished, and the nervous system is the first to suffer. It is upon it in most of us that the greatest strain of daily life must fall, and, in consequence, it is the first to show signs of breakdown. Now, we are taught by clinical experience and by scientific experiment alike, that the primary change produced by weakening nerve-structures is an undue sensitiveness or irritability, and in this we have a clue to the cause of neuralgic pains. So long as the nerves are up to standard strength, so long they may bid defiance to all ordinary irritation. But when they fall below that standard there is a different story to tell, and a mere trifle, even the slightest draught, sets them tingling with pain. Thus it is that the advent of Winter, with its cold, its damp, its fogs, its gas-lit rooms, and its increased business-pressure, is also the advent of the neuralgia season. So much for the common causes of ordinary neuralgia, but there remain a certain number of cases that depend on an entirely different class of conditions—upon what is called "local irritation," such as decayed teeth, overstrained eyes, and the like.

## THE NATURE OF NEURALGIA.

The exact nature of neuralgia has yet to be found out, but there can be no doubt that it is some alteration in the nerve tracts. One circumstance there is that is very suggestive. The neuralgic subject is typically a thin subject. There are, of course, exceptions to every rule, and there are to this. Neuralgia does occur in fairly stout people, but very rarely, and when it does we believe it can generally be traced to some form of "local irritation." The striking fact remains that nearly all who suffer from the disease are very insufficiently supplied with fat, and fat is one of the most important elements in the structure of nerves. A nerve-fiber consists of two essential parts—the axis-cylinder and its sheath. The axis-cylinder is a long wire-like structure continuous throughout the whole length of the nerve—say, from the toes right up to the brain. It is the active, sensitive, feeling part, and it is along it that the nerve messages are flashed. The sheath, or "white substance of Schwann," is a thick fatty envelope wrapped around the axis cylinder in sections and comparable in its nature to the protective insulating covering of a telegraph wire. Now, when the fats of the body generally are deficient it follows almost of necessity that this fatty envelope of the nerves will be deficient also. In other words, the sensitive axis cylinders will be deprived of their normal protective covering and left exposed to the sweet mercies of colds and draughts. It is very significant in connection with this that neuralgias do increase with the onset of the cold weather, and that they affect chiefly the face and head—the parts uncovered by protecting clothes. Perhaps even more significant still is the fact that, on the whole, the most reliable and efficient remedy for neuralgia is cod-liver oil.

## THE TREATMENT OF NEURALGIA.

In treating neuralgia the pain has to be relieved and the disease has to be cured. These are by no means the same, and it is very important to bear this fact clearly in mind. The pain must be relieved as speedily as possible, and this is accomplished by the use of

various nervine sedatives. Such sedatives are, however, only temporary expedients. They have no effect in preventing a return of the disease, and, indeed, if injudiciously used, they may have exactly the opposite effect. Before, then, passing on to them it would be well to consider the really more important question of

## THE CURE OF THE DISEASE.

Put shortly, this is the correction of the causes of the neuralgia. The body generally, and the nervous system in particular, must be brought up to the proper standard of vitality. For this purpose tonics, such as iron, arsenic, and strychnine, will be found valuable. The diet should be light, but nourishing, and always taken at regular hours. Plenty of sleep, fresh air, and out-of-door exercise should be insisted upon. Lastly, cod liver oil, or some preparation of it, ought to be given, and its use continued for a considerable period.

Of course, any morbid condition, such as dyspepsia or constipation, should be energetically treated, and when there is any source of local irritation it must be removed at once, if possible.

## THE RELIEF OF THE PAIN.

Many drugs have been vaunted from time to time as positive cures for the pains of neuralgia. As a matter of fact, however, there is no one remedy that is absolutely certain in its results. What has been found excellent in one case will often be quite useless in another and apparently precisely similar one. The obvious deduction, then, is not to be discouraged when, after a fair trial, one remedy has failed, but simply to proceed to give another. Among the external applications, belladonna, aconite, and menthol are the most reliable, and as examples of internal remedies that will be likely to succeed we append a few formulæ which we have found from practical experience to be useful :

(1)

Ammonii chloridi..... 3 liij  
Tinct. gelsemii..... 3 ij  
Ext. glycyrrhiz. liq..... 3 ss  
Aq. chloroformi ad..... 3vj

Misce et filtra.

Sig. : One tablespoonful every four hours till the pain is relieved.

(2)

Butyl-chloral hyd..... 3 j  
Ext. cocæ liq. (miscible)..... 3vj  
Glycerini..... 3 ij  
Tinct. aurantii..... 3 ij  
Aq. ad..... 3vj

M.

Sig. : One tablespoonful every four hours.

(3)

Antipyrini..... 3 ij  
Tinct. cascariil..... 3 ss  
Tinct. card. co..... 3 ss  
Glycerini..... 3 ss  
Aq. ad..... 3vj

M.

Sig. : One tablespoonful every four hours.

(4)

Exalgini..... gr. xxiv  
Sacch. lact..... gr. xxiv  
Ess. menth. pip..... miiij

Misce bene et divide in partes duodecim.

Sig. : One powder every four hours.

(5)

Phenacetin..... 3j  
Quin. sulph..... 3ss

Misce et divide in pulveres sex.

Sig. : One every four hours.

## Notes, Queries, and Answers.

*We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.*

*When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.*

**Tyrotaxon**—J. E. G., Three Rivers, Mich.—In the text books tyrotaxon is vaguely referred to as a diamine compound having the chemical formula  $C_6H_8N_2$ . The uncertainty regarding its chemical properties does not, however, extend to a knowledge of its physiological effects, for Professor Vaughan has, by carefully conducted experiments, fully demonstrated its poisonous action on man and the lower animals. It is the mystery attending its production in preparations of milk and cream together with the uncertainty regarding its presence there at all that puzzles medical men and chemists. When present in ice cream it is thought by some medical men to be produced by electrolytic decomposition of the mixture, the freezer acting as an electric battery and the mixture an electrolyte; but this is surely a case of carrying theory to its extremest limits.

**Ingluvine**—J. M. M., Brooklyn.—By the makers ingluvin is claimed to be a pepsin prepared from the gizzard of birds, but this is questioned in some quarters, one experimenter having declared the substance to be nothing more than a mixture of pepsin and common salt. We have never examined the article and are consequently unable to express an opinion.

**Bock Beer Essence**—J. H., St. Louis.—This is a flavoring compound used by some brewers to give a heavy flavor to beer. The following is said to fairly represent it:

|                          |         |
|--------------------------|---------|
| Tincture of lupulin..... | 1 part  |
| Pyroligneous acid.....   | 2 parts |
| Alcohol.....             | 8 parts |

Mix.

**Ruppert's Face Bleach**—A. D., Madison.—Recent analyses of this article have resulted in the suggestion of the following formula:

|                                |           |
|--------------------------------|-----------|
| Corrosive sublimate.....       | 7½ grains |
| Tincture of benzoin.....       | 1 drachm  |
| Rose water enough to make..... | 8 ounces  |

Mix.

**Nubian Blacking**—J. H., New York.—The formula specified in the English patent reads as follows:

|                        |           |
|------------------------|-----------|
| Campbor.....           | 21 parts  |
| Venice turpentine..... | 16 parts  |
| Shellac.....           | 36 parts  |
| Aniline blue.....      | 15 parts  |
| Bismarck brown.....    | 15 parts  |
| Alcohol.....           | 950 parts |

Dissolve.

**Armenian Paper**. T. C. O., Chicago, Ill.—Ordinary unsized paper is soaked in a solution prepared as follows:

|                             |           |
|-----------------------------|-----------|
| Gum benzoin.....            | 3 vi      |
| Gum myrrh.....              | gr. xxxvj |
| Orris in coarse powder..... | 3 iss     |
| Musk.....                   | 3 ss      |
| Otto of rose.....           | Mijj      |
| Alcohol.....                | 3 iv      |

Macerate for a day, then percolate to make 3 oz.

**Salix Compound**. S. C. S., Lindsey, O.—The sample which you send is composed of salicylic acid, and does not, on a cursory examination, seem to contain any admixture. The therapeutic action of salicylic acid is very fully described in Hare's "Practical Therapeutics," 3d edition, p. 293.

**Hair Tonics**. F. S. West, Hoboken, N. J.—Numerous recipes for hair tonics have been published from time to time in these pages. We are indebted to the "Manual of Formulæ" for a few of the formulas given below:

**Bay Rum Tonic.**

|                              |            |
|------------------------------|------------|
| Bay rum.....                 | 100 ounces |
| Glycerin.....                | 16 ounces  |
| Tincture of cantharides..... | 8 ounces   |
| Tincture of quillaja.....    | 8 ounces   |
| Rose water.....              | 8 ounces   |
| Orange flower water.....     | 8 ounces   |

Mix and filter, if necessary.

**Stimulant Wash.**

|                              |           |
|------------------------------|-----------|
| Essence of lemon.....        | 1 drachm  |
| Tincture of cantharides..... | 2 drachms |
| Oil of almonds.....          | 1 ounce   |
| Liquid ammonia.....          | 1 ounce   |
| Spirit of rosemary.....      | 8 ounces  |

Mix. "Shake the bottle."

**Astringent Lotion.**

|                      |           |
|----------------------|-----------|
| Oil of lemon.....    | 1 drachm  |
| Oil of bergamot..... | 1 drachm  |
| Tannic acid.....     | 5 drachms |
| Castor oil.....      | 3 ounces  |
| Alcohol.....         | 18 ounces |

Mix.

To be rubbed into the roots of the hair daily.

**Erasmus Wilson's Hair Wash.**

|                              |           |
|------------------------------|-----------|
| Oil of rosemary.....         | 1 drachm  |
| Oil of lavender.....         | 1 drachm  |
| Tincture of cantharides..... | 1½ ounces |
| Eau de cologne.....          | 12 ounces |

Mix.

**Flash Test for Oils**. J. C. N., New York City.—The method of conducting this test is very simple. The oil contained in an open porcelain basin or other vessel capable of accommodating a thermometer is heated on a sand bath, while a burning match or taper with the smallest possible flame is held above the oil but not allowed to touch it. The temperature of the oil is accurately observed, and its flash point determined by the temperature at which the vapor ignites. Oil, the vapor of which flashes before the mercury rises to one hundred and thirty degrees, is dangerous to use in lamps designed for household use. Several forms of special apparatus have been devised for applying the flash test, and where much work of this sort is done it is advisable to procure a set of the apparatus. It consists essentially of a small lamp for heating and a specially constructed copper dish mounted on a stand, and, of course, accompanied by a thermometer.

**Chicle Gum**—N. & B.—Chicle is the dried milky juice of the *Sapota Müllerii*. It is also obtained from other trees of undetermined species indigenous to Central South America. In this market chicle is found as tough and very flexible elastic pieces of a grayish-red color having an odor like that of guttapercha which it resembles and for which it is often substituted. It is soluble in benzine, in warm oil of turpentine and in carbon disulphide and melts at, 45° C. In the New York market the substance is handled in a large way by a few dealers only, though the jobbing trade can supply small quantities. Reference to our wholesale prices current will show its present cost from the hands of importers in cargo lots.

The commercial gum requires careful treatment before it can be made fit for chewing purposes. It is placed in a boiler with sufficient water to completely cover it; the water is then raised to the boiling point and maintained at this heat until all particles of dirt and foreign substances have separated; the lighter impurities will float on the surface, while the heavier

will fall to the bottom. After a process of skimming the gum is removed from the water and while still in a semi solid state is flavored with the usual ingredients by careful manipulation and heating. When completed the gum is poured into molds, afterwards broken into cubes and squares of suitable size.

**Cheap Liniment.**—S. F. K., Philadelphia.—We know of nothing better for the production of a cheap liniment than the formula given below; it has the advantage of furnishing a liniment adapted for almost any indication calling for a stimulating application to an unbroken surface:

Powdered capsicum..... ½ i  
Oil of camphor..... 1 iiss  
Oil of turpentine..... 1 xvi

Let stand for seven days and filter, beat the filtrate with contents of three eggs—albumen and yolk—until they are thoroughly mixed; then add:

Acetic acid..... 1 iiss  
Water..... 1 xvi

This costs about \$1.25 a gallon and should be retailed in 2 oz. panels bearing an appropriate label.

**Questions in Dispute.**—S. A., New York.—“To settle a dispute kindly answer the following:

“Will quicksilver evaporate under ordinary conditions, *i.e.*, conditions not brought about by chemicals, the action of heat or cold?”

It is within the bounds of reasonable speculation to suppose a gradual evaporation to take place when mercury is exposed to the air. But what is more likely to happen is oxidation, which would contribute to increase rather than to diminish its bulk.

“If illuminating gas is allowed to come into contact with quicksilver in its passage through a pressure device to the burner, will the gas be likely to absorb any of the quicksilver, and thereby create a compound injurious to health?”

It is most unlikely. For a more complete answer to this query we must refer you to any elementary textbook on chemistry.

**Blue Ointment**—W. E. M., Newark, asks for a formula for making blue ointment which he says appeared in an earlier number of this journal.

We do not recall ever having published a formula for this ointment which differed in any essential particular from the formula official in the 6th edition of the U. S. Pharmacopœia. The formula now official produces quickly and without much labor an ointment of satisfactory consistence and appearance. The improvement in the formula of the 7th edition consists in first extinguishing the mercury in the oleate of that metal and adding to the finely divided mixture the necessary amounts of lard and suet previously melted together and partially cooled. The whole is triturated until globules of mercury are no longer visible under a lens magnifying ten diameters.

**Sal Volatile.**—From the same correspondent we also get a request for information as to the composition of the article known to German and British customers as “Sal Volatile.”

This is a synonym for Aromatic Spirit of Ammonia, and the latter is always dispensed in Europe when the former is called for though in America ammonium carbonate is generally dispensed.

**Root Beer Extract.**—W. E. M.—Try the following:

*Root Beer Extract.*

Sassafras..... 5 pounds  
Spikenard..... 2 pounds  
Wintergreen..... 1 pound  
Birch bark..... 1 pound  
Sassafras bark..... 1 pound  
Wild cherry..... 8 ounces  
Pickled ash..... 1 pound  
Lima ginger..... 4 ounces  
Nutmeg..... 4 ounces

Reduce the drugs to coarse powder; moisten with diluted alcohol and transfer to a percolator of suitable capacity, and percolate with a mixture of 2 parts of water to 1 part of alcohol until the drugs are exhausted.

Root Beer Syrup is made by adding one ounce of the extract to each 31 ounces of simple syrup.

## Bibliography.

**REACTIONS.** A selection of organic chemical preparations important to pharmacy in regard to their behavior to commonly used reagents. By F. A. Flückiger, Ph.D., M.D. Translated, revised and enlarged by J. B. Nagelvoort, analytical chemist in the pharmaceutico-chemical laboratory of Parke, Davis & Co., Detroit: George S. Davis, 1893.

As its title indicates this is an English translation of Flückiger's well-known “Reactionen,” a work which presents in brief but comprehensive form a large amount of practical information on the identity reactions of different organic chemical preparations. 109 compounds in all are described in the treatise, and these range from acetanilid to veratrin, and include several of the more recently introduced synthetical compounds as: Aristol, Diuretin, Europhen, Exalgin, Iodol, Phenacetin, Phenocoll hydrochloride, Piperazine, Saccharin, Salol, Salophen, Sulphonal.

From the view-point of the pharmaceutical chemist the work is all that could be desired, presenting as it does within the compass of some 154 pages an amount of valuable information, not otherwise obtainable, except through laborious search through the different journals of chemistry and pharmacy. The detailed processes for estimating the purity of the different chemicals enumerated in its pages, though brief, are described with great clearness and should prove easy of comprehension even to those who are unfamiliar with the work.

We cannot compliment the author on his premature adoption of the rules of the chemical section of the American Association for the Advancement of Science (*Pharmaceutical Record*, 1892, p. 410) with regard to the nomenclature of chemical compounds. It would have been more advisable in the present work to have followed the wise lead of the Committee on Revision of the U. S. Pharmacopœia, and delayed the innovation until the new rules had received more general acceptance. The peculiar orthography of the translator is apparent in many places throughout the work, and will prove a little annoying to American students accustomed to more precision in these matters. The frequent use of heavy faced and italic type, so dear to the heart of the German journalist, is also a disagreeable feature and we trust will be amended in future editions of the work.

The publishers have done their work well, the volume being printed on paper of excellent quality and bound in covers of most attractive red, the bright appearance of which is suitably complemented by the deep black letters of the title.

**MANUAL OF BACTERIOLOGY FOR PRACTITIONERS AND STUDENTS, WITH ESPECIAL REFERENCE TO PRACTICAL METHODS.** By DR. S. L. SCHENK; Translated from the German (by the author's permission), with an Appendix, by W. R. Dawson, B.A., M.D., Univ. Dubl.; with 100 Illustrations, partly colored. London: Longmans, Green & Co., 1893.

This book is an English edition rather than a mere translation of Professor Schenk's “Grundriss der

*Bakteriologie*," which made its appearance not long since in Germany, both the translator and Dr. Schenk himself having contributed additional data.

The work is designed with a view to combining practical and theoretical instruction serving as a text book in the classroom and as a guide in the laboratory, and the design seems well carried out.

The first chapter gives a brief and excellent introduction to the subject matter in the way of a disquisition on the morphology and biology of micro-organisms in general.

The next two chapters are devoted to a description of the apparatus and reagents used in bacteriological investigations.

Then follows the description in detail of the methods of making these investigations. The bacteriological examinations of air, water, earth and decaying matter are then taken up, the pathogenic micro-organisms being given special study, and the remainder of the book is devoted to a study of the micro organisms present in different portions of the body.

The work is well illustrated, is thoroughly abreast of the times, and will prove a valuable one.

**A TEXT-BOOK OF PRACTICAL THERAPEUTICS**, with Especial Reference to the Application of Remedial Measures to Disease and their Employment upon a Rational Basis. By Hobart Amory Hare, M.D., B.Sc., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia; Laureate of the Royal Academy of Medicine in Belgium, of the Medical Society of London, etc.; President of the Section of Therapeutics in the Pan American Medical Congress. Third Edition. Enlarged and Thoroughly Revised. Cloth, \$3.75; leather, \$4.75. Philadelphia, Lea Brothers & Co., 1892.

The most convincing evidence of the worth or permanent value of a book is to be found in the demand which exists for it. Judged by this standard, Professor Hare's excellent manual of therapeutics will take a very prominent position among books of its kind; for it has found such complete favor with physicians and students of medicine as to require the printing of three large editions within a period covered by two years.

Of the portions of the work dealing with the pharmacology of drugs (with which we are chiefly concerned), those devoted to descriptions of the active principles contained in drugs of vegetable origin; the physiological action of poisons antidotes, and the administration of remedies will chiefly interest the pharmaceutical reader. Here he will find arranged, in most convenient alphabetical order, descriptions or rather summaries of the most prominent characteristics of all of the drugs and preparations recognized in the pharmacopœias of both this country and Great Britain, together with many remedies which have not yet found a place in either work, but which are used more or less by the clinicians of each country. Though many of the newer remedies enumerated in the work under review have since found a place in the seventh edition of the U. S. Pharmacopœia, sufficient of the comparatively untried or recent remedies find mention to leave the volume a most useful compendium of the pharmacology of the newer *materia medica*. Thus directions are given for the administration and application of many of the more recently introduced organic compounds and other remedies—sa'ophen, guaiacol, diuretin, euophen, thiol, phenocoll hydrochloride, piperazine, dermatol, pentol, terpin hydrate, terpinol and the salts of strontium being among the number.

The practical character of the treatise is noticeable throughout, but is especially borne in upon one when

obliged to consult its comprehensive indexes of drugs and diseases; these are among the most suggestive and ready reference guides to the contents of a book that have come under our observation in recent years, and form a most noteworthy feature of a truly valuable text-book of practical therapeutics.

Taken altogether it is not too much to say that it is one of the most valuable of the smaller works on the therapy of drugs in the English language; and we would earnestly advise every student of medicine and of pharmacy to possess himself of a copy.

**Formulaire des Nouveaux Remèdes**, Par Dr. G. Bardet. Septième Edition, Paris, Octave Doin, 8 Place de L'Odéon: 1893.

This work is divided into four parts, the first of which consists of a review of new remedies. In this the articles are taken up alphabetically, the chemistry, or natural history, therapeutics and posology of each being briefly treated, so as to embrace all the essential facts concerning each article. This occupies some 242 pages.

In the second part are found numerous formulas for the administration of the newer *materia medica*, all of which are grouped alphabetically, under their therapeutic uses, as anesthetics, anthelmintics, antiseptics, etc. This occupies 72 pages of the book.

The third part of the volume comprises a collection of miscellaneous formulas filling some ten pages. Then follow tables of the approximate equivalents of the contents of cups and glasses, the weight and size of drops, and the number of drops of various substances contained in one gramme.

The concluding portion of the work is devoted to a list of new remedies, giving a very concise description of the physical and therapeutic properties and posology of each. This latter list will prove of value to the pharmacist, giving within a brief compass (55 pages) all the information which it is essential for him to have concerning the medicaments named.

**ANALYSIS OF MILK AND MILK PRODUCTS**. By Henry Leffmann, M.D., Ph.D., Professor of Chemistry in the Woman's Medical College of Pennsylvania, etc., and William Beam, M.A., M.D., Philadelphia: P. Blakiston, Son & Co., 1893. 12mo, 92 pp., \$1.

Drs. Leffmann and Beam in "Analysis of Milk and Milk Products" sustain their reputation as authorities on the methods of examining milk and other food products for the detection of impurities and sophistications.

We cannot do better than recommend every one interested in the analysis of milk, butter and cheese to obtain a copy of this book; it is the best treatise on the subject which has yet appeared, and no one pretending to skill in the ordinary analytical work of professional chemists can afford to be without it.

**HOW TO JUDGE A HORSE**, by Captain F. W. Bach, 12mo cloth, fully illustrated, \$1.00. New York, W. R. Jenkins, 851 Sixth avenue.

Everybody loves a horse. Everybody ought to study its conformation. Every purchaser knows by experience, how difficult it is to arrive at correct conclusions as to its soundness and qualities.

Unlike many valuable books on the exterior of the horse, this little treatise has the advantage of great conciseness in pointing out, in few pages, the most important guiding points for the judging, and some points on methods of training young or obstinate horses are added, as it may become necessary for the owner to break in his young stock himself or correct those having formed bad or dangerous habits, especially

if living in the country with nobody near capable of handling young or obstinate horses.

A few remarks, concerning how to handle the reins properly in driving, may be of interest to some of the readers. Also bits and biting, saddles and saddling, and stable drainage are considered.

All horse owners or persons intending to purchase a horse should read this work.

#### A New Illustrated Dictionary of Medicine, Biology, and Collateral Sciences.

Dr. George M. Gould, already well known as the editor of two small medical dictionaries, has now about ready an unabridged, exhaustive work of the same class, upon which he and a corps of able assistants have been uninterruptedly engaged for several years.

The feature that will attract immediate attention is the large number of fine illustrations that have been included, many of which—as, for instance, the series of over fifty of the bacteria—have been drawn and engraved especially for the work. Every scientific-minded physician will also be glad to have defined several thousand commonly used terms in biology, chemistry, etc.

The chief point, however, upon which the editor relies for the success of his book is the unique epitomization of old and new knowledge. It contains a far larger number of words than any other one volume medical lexicon. It is a new book, not a revision of the older volume. The pronunciation, etymology, definition, illustration, and logical groupings of each word are given. There has never been such a gathering of new words from the living literature of the day. It is especially rich in tabular matter, a method of presentation that focuses, as it were, a whole subject so as to be understood at a glance.

The latest method of spelling certain terms, as adopted by various scientific bodies and authorities, have all been included, as well as those words classed as obsolete by some editors, but still used largely in the literature of to-day, and the omission of which in any work aiming to be complete would make it unreliable as an exhaustive work of reference.

The publishers announce that, notwithstanding the large outlay necessary to its production on such an elaborate plan, the price will be no higher than that of the usual medical text book.

#### BOOKS AND PAMPHLETS RECEIVED.

Eleventh Annual Report of the State Board of Pharmacy of Illinois with an Abstract of Registered Pharmacists and Registered Assistant Pharmacists for the year 1892.

The Profession of Medicine as Sketched from the Outside and the Inside. By S. W. Kelley, M.D. Reprinted from the *Cleveland Medical Gazette*.

Nostrums for Increasing the Yield of Butter. By Harvey A. Wiley, Chemist of the U. S. Department of Agriculture.

Seventh Annual Report of the Virginia Board of Pharmacy.

Proceedings of the Illinois Pharmaceutical Association at the Thirteenth Annual Meeting held at Springfield, June 7 and 8, 1892.

Archives of the Cincinnati College of Medicine and Surgery, Vol. I. Reprinted from the *Cincinnati Medical Journal*

#### COLLEGE ANNOUNCEMENTS.

Department of Pharmacy of the Scio College.

Pittsburgh College of Pharmacy.

Department of Pharmacy of the Ohio Normal University.

Oregon College of Pharmacy's Department of Pharmacy, Willamette University.

National College of Pharmacy.

THE BROOKLYN COLLEGE OF PHARMACY.—Third annual announcement, session of 1893-'94, College Building, 399 Classon avenue, near Green avenue, Brooklyn, N. Y.

A few striking changes have been made in the new prospectus of the Brooklyn College, and these it is believed are in the nature of improvements. The synopses of the different courses are very clearly mapped out and should prove serviceable to students, while the syllabuses of lectures convey a clear idea as to the progress likely to be made during the college year.

#### Miscellaneous Formulas.

##### Formulas for Phenosalyl.

###### PHENOSALYL PENCIL.

|                         |         |
|-------------------------|---------|
| Phenosalyl.....         | gr. xv  |
| Gum arabic.....         | gr. xxx |
| Flour.....              | 3v      |
| Glycerin and water..... | q. s.   |

###### VAGINAL CAPSULES.

|                 |         |
|-----------------|---------|
| Glycerin.....   | 3ij 3ij |
| Water.....      | 13vj    |
| Gelatin.....    | 3iiss   |
| Phenosalyl..... | gr. xv  |

Divided into 20-gramme capsules.

###### GARGLE.

|                  |          |
|------------------|----------|
| Phenos. lyl..... | gr. lxxv |
| Glycerin.....    | 13vj     |
| Spts. mint.....  | 13iiss   |
| Water.....       | 13xiv    |

Gargle every half hour.

###### SYRUP OF PHENOSALYL.

|                  |           |
|------------------|-----------|
| Phenos. lyl..... | gr. viiij |
| Spts. mint.....  | 13iix     |
| Syrup.....       | 13viiij   |

Dessertspoonful to tablespoonful four times a day; children, one half to one teaspoonful.—P. GROU, *Le Progrès Medical*.—*Med. Bulletin*.

#### COLD VARNISH FOR PHOTOGRAPHIC NEGATIVES.

[VALENTA *Bayr. Ind. u. Gewerbe-Bl.*]

|  |                       |
|--|-----------------------|
| I. Sandarac.....   | 18 grammes            |
| Alcohol.....   | 100 cubic centimeters |
| Lavender oil.....  | 1 cubic centimeter    |
| II. Spirit of ammonia (with absolute alcohol).....                     | 100 cubic centimeters |
| Shellac.....   | 8 to 14 grammes       |
| or add ammonia water to a solution of shellac in absolute alcohol..... |                       |
| III. Angola copal.....   | 30 grammes            |
| Amber scraps.....  | 5 grammes             |
| Ether.....   | 300 cubic centimeters |
| Acetone.....   | 200 cubic centimeters |
| Chloroform.....  | 10 cubic centimeters  |

Dissolve either by allowing to stand a long time or by the aid of heat in a back flow condenser.

|                       |                        |
|-----------------------|------------------------|
| IV. Dammar.....       | 8 grammes              |
| Alcohol.....          | 10 cubic centimeters   |
| Benzol.....           | 900 cubic centimeters  |
| V. Pyroxylon.....     | 150 grammes            |
| Acetone.....          | 1000 cubic centimeters |
| Amyl acetate.....     | 2000 cubic centimeters |
| Benzol.....           | 2000 cubic centimeters |
| VI. Sandarac.....     | 100 grammes            |
| Benzol.....           | 400 cubic centimeters  |
| Acetone.....          | 400 cubic centimeters  |
| Absolute alcohol..... | 200 cubic centimeters  |

Dissolve by aid of a water bath.

The ordinary negative varnish does not operate satisfactorily without slightly warming the plates to which it is applied. It is claimed for the above that they yield satisfactory results when applied cold.

## SODA WATER SYRUPS.

## COFFEE SYRUP.

|                   |                     |
|-------------------|---------------------|
| Mocha coffee..... | 6 ounces            |
| Java coffee.....  | 8 ounces            |
| Gelatin.....      | $\frac{1}{2}$ ounce |
| Sugar.....        | 6 pounds            |

Boiling water enough to make one gallon.

On the finely ground coffee packed loosely in a tin percolator pour one pint of boiling hot water; allow to macerate a few minutes then percolate with boiling hot water into a suitable vessel containing the sugar until the solution measures one gallon.

## CREAM SYRUP.

|                       |          |
|-----------------------|----------|
| Fresh cream.....      | 1 pint   |
| Fresh milk.....       | 1 pint   |
| Granulated sugar..... | 3 pounds |

Mix.

## CHERRY CREAM.

|                                   |          |
|-----------------------------------|----------|
| Fresh juice of cherries.....      | 8 ounces |
| Fluid extract of wild cherry..... | 1 ounce  |
| Citric acid.....                  | 1 dram   |

Simple syrup enough to make four pints.

Mix.

## PEACH BLOW.

|                                 |                       |
|---------------------------------|-----------------------|
| Lemon juice.....                | 8 ounces              |
| Essence of raspberry.....       | 4 drams               |
| Compound spirit of juniper..... | 8 ounces              |
| Sugar.....                      | $1\frac{1}{2}$ pounds |

Water enough to make four pints. Solution of carmine, N. F., sufficient to color.

## POWDER FOR THE CURE OF GAPES IN POULTRY.

|                      |       |
|----------------------|-------|
| Calc. chlorinat..... | 3 j   |
| Camph.....           | gr. v |
| Cretæ precip.....    | 3 iv  |
| Magnes. lev.....     | 3 iv  |

## LIQUOR COPAIBÆ, CUBEBÆ ET BUCHU.

|                                |        |
|--------------------------------|--------|
| Pulv. cubebæ.....              | 3 ii   |
| Ol. copaibæ.....               | 3 iv   |
| Ol. pimentæ.....               | 3 iiss |
| Tr. buchu.....                 | 3 j    |
| Inf. buchu conc. (1 to 1)..... | 3 j    |
| Freshly slaked lime.....       | 3 ss   |
| Alcohol.....                   | 3 ij   |
| Aque.....                      | 3 ss   |
| Subcarbonate of soda.....      | 3 ss   |

Rub up the cubebs and lime with 12 oz. of water, and boil for ten minutes. Dissolve the oils in the spirit, add the tincture and infusion, mix the two solutions, stand for twenty-four hours, shaking occasionally. Dissolve the soda in 2 oz. of water, and add to the liquor; stand another twenty-four hours and filter through a wet filter paper.

Dose: One or two teaspoonfuls three or four times a day.

## CHEAP EFFERVESCENT LAXATIVE.

|                           |       |
|---------------------------|-------|
| Sodæ bicarb.....          | 1 lb  |
| Ac. tartaric.....         | 14 oz |
| Magnes. sulph. exsic..... | 19 "  |
| Sacch. alb.....           | 9 lbs |
| Ess limonis.....          | 3 ss  |

## SYRUP OF PHOSPHATE OF IRON, QUININE AND STRYCHNINE (EASTON'S SYRUP).

[R. WRIGHT.—British Pharmaceutical Conference.]

|  |                |
|--|----------------|
| Iron wire free from oxide.....                 | 75 grains      |
| Concentrated phosphoric acid, sp. gr. 1.5..... | 11 fl. drachms |
| Strychnine in powder.....                      | 5 grains       |
| Quinine phosphate.....                         | 120 grains     |
| Simple syrup.....                              | 13 fl. ozs.    |
| Distilled water, a sufficient quantity.        |                |

Place the iron wire, and the phosphoric acid previously diluted with an equal volume of distilled water, in a small flask, plug the neck with cotton-wool, and heat gently until the reaction is complete; then add the strychnine and the phosphate of quinine, and shake till dissolved; filter the solution into the cold syrup, wash the filter, and add as much more distilled water as may be required to make the volume of syrup up to one pint.

The above preparation will contain 1 grain phosphate of iron,  $\frac{3}{4}$  grain phosphate of quinine,  $\frac{1}{16}$  grain strychnine in each fluid drachm.

## ANTI-ASTHMATIC FUMIGATING TEA.

[*Süddeutscher Apotheker-Zeitung.*]

|                                      |                           |
|--------------------------------------|---------------------------|
| Stramonium leaves, coarsely cut..... | 100 grammes [1540 grains] |
| Belladonna leaves, coarsely cut..... | 25 grammes [387 grains]   |
| Hyoscyamus leaves, coarsely cut..... | 25 grammes [387 grains]   |
| Potassium nitrate.....               | 50 grammes [770 grains]   |
| Potassium carbonate.....             | 0.25 grammes [4 grains]   |
| Alcohol.....                         | 50 grammes [14 drachms]   |
| Water.....                           | 300 grammes [10 fl. ozs.] |

Moisten the leaves with the alcohol, pack firmly in a vessel and keep tightly closed for 24 hours. Dissolve the potassium salts in the water, filter, add the filtrate to the leaves, allow to stand in a closed receptacle for another 24 hours, then dry the tea thoroughly.

## CLYSTER FOR DYSENTERY.

[*Med. Chir-Rundschau.*]

|                        |   |
|------------------------|---|
| Boric acid.....        | 16 grammes [246 grains]                 |
| Tannin.....            | 3 grammes [45 grains]                   |
| Tincture of opium..... | 15 drops                                |
| Water.....             | 400 grammes [13 $\frac{1}{2}$ fl. ozs.] |

Add to a quart of boiling water and use when the temperature has fallen to 36° C., the bowels of the patient having first been cleared by a dose of castor oil. This injection should be given once a day.

## MENTHOL DENTAL CREAM.

[*Annali di Chimica e di Farmacologia.*]

|                         |                         |
|-------------------------|-------------------------|
| Flowers of sulphur..... | 25 grammes [387 grains] |
| Magnesia carbonate..... | 25 grammes [387 grains] |
| Menthol.....            | 1 gramme [15 grains]    |
| Cochineal.....          | 0.50 grammes [8 grains] |
| Glycerin.....           | a sufficient quantity.  |

## CREASOTE EMULSION.

[*LÉGER, L'Union Pharmaceutique.*]

|                          |                         |
|--------------------------|-------------------------|
| Saccharated caseine..... | 10 grammes [154 grains] |
| Creasote.....            | 10 grammes [154 grains] |
| Alcohol.....             | 10 grammes [3 drachms]  |
| Water.....               | a sufficient quantity.  |

Dissolve the saccharated casein in 10 grammes [160 minims] of water and the creasote in the alcohol, mix the two solutions and dilute with water to make 1,000 grammes [33 $\frac{1}{3}$  fl. ozs.].

## DIURETIC WINE.

[*Süddeutscher Apotheker Zeitung*]

|                                    |  |
|------------------------------------|--|
| Squill, cut up fine.....           | 10 grammes [154 grains]                  |
| Fox-glove leaves, cut up fine..... | 10 grammes [154 grains]                  |
| Juniper berries, crushed.....      | 60 grammes [15 $\frac{1}{2}$ drachms]    |
| Sherry wine.....                   | 1000 grammes [33 $\frac{1}{3}$ fl. ozs.] |

Digest with frequent agitation at 15 to 20° C. for eight days, express, filter and to the filtrate add any desired proportion of potassium acetate.

**Collodium Belladonnæ.**—At the Nottingham meeting of the British Pharmaceutical Conference two formulas were proposed to take the place of the one given in the formulary of the British Pharmaceutical Conference. These differ in manipulation only.

## I. By R. WRIGHT.

|   |                 |
|---|-----------------|
| Fluid extract of belladonna leaves..... | 10 fluid ounces |
| Pure ether, sp. gr. 720.....            | 10 fluid ounces |
| Camphor.....                            | 130 grains      |
| Pyroxilin.....                          | 183 grains      |
| Canada balsam.....                      | 365 grains      |
| Castor oil.....                         | 183 grains      |

Mix the fluid extract of belladonna with the ether, and add the other ingredients. Set aside for a few days, and then decant.

## II. By W. A. NAYLOR.

|  |                 |
|--|-----------------|
| Liquid extract of belladonna leaves..... | 10 fluid ounces |
| Ether.....                               | 10 fluid ounces |
| Camphor.....                             | 130 grains      |
| Pyroxilin.....                           | 183 grains      |
| Canada balsam.....                       | 365 grains      |
| Castor oil.....                          | 183 grains      |

Mix the liquid extract and the ether, and set aside for twelve hours. Decant and dissolve therein the remaining ingredients in the order in which they occur in the formula.

## New Inventions and Novelties.

### A Benzin Soldering Iron.

The illustration shows a soldering iron made by G. Barthel which renders the user independent of gas or



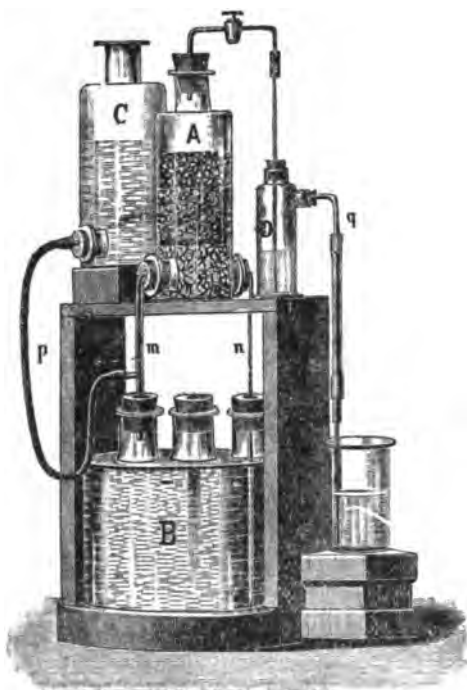
coal fire. The reservoir is in the handle. The soldering iron, or rather copper, may be replaced by a lamp. Benzin is the fuel used in it.

### New Sulphureted Hydrogen Apparatus for the Analytical Laboratory.

The apparatus illustrated herewith was devised by L. L. de Koninck and described substantially as follows in the *Deutsche Chemiker Zeitung* (No. 61, p. 1099).

In the flask *A*, provided with two openings near the bottom, a layer of broken glass or porcelain is placed and on top of this the iron sulphide. The flask *A* being set on a wooden stand, as shown in the illustration, is connected with a three-necked Woulff flask *B* by means of *n*, a tube reaching nearly to the bottom of *B*, and by *m*, a tube opening just below the stopper of *B*. The tube *m* has a branch which is connected by means of the rubber tube *p* to the pressure flask *C*.

The flask *A* containing the iron sulphide is also connected, through a stop cock, with a wash-bottle *D* having an outlet through the rubber tube *q*. The glass tube at the end of *q* being drawn out to a fine point so



that the escaping gas will pass out in small bubbles, thus securing its fullest action. The stop cock may be attached directly to the bottle *A*.

To operate, place the diluted acid in *C* and open the stop cock. The acid will then pass through *p* and *m* into *A* where, coming into contact with iron sulphide, iron chloride is formed and hydrogen sulphide set free. The solution of iron chloride on account of high specific gravity will pass down through *n*, spreading over the bottom of *B* the supply of acid remaining as a supernatant layer. As fast as it is neutralized the acid will pass down into the lower part of *B* until it is all saturat-

ed. The iron chloride solution may then be removed from *B* by means of a siphon. When not in use the pressure flask *C* should be placed on the table beside *B*. The neck of *C* must be taller than that of *B*. The pressure is regulated by placing blocks of wood under *C*.

### An Automatic Extractor for Washing Precipitates.

The apparatus figured herewith is the device of W. D. Horne and is described by him in the *Journal of the American Chemical Society* substantially as follows:

One part of the apparatus consists of a wide-mouthed bottle of 250 c.c. capacity closed by a cork perforated, by two glass tubes. One tube projects outward about three or four cm., and tapers to a moderately fine point. The other tube, after emerging from the cork, curves directly over the edge of the cork and extends down the full length of the bottle on the outside. The bottle, being filled with water, is inverted, and the water drops from the end of the short tube, while the necessary air enters by the long bent tube and bubbles up through the column of water in the bottle. As the rate of flow or dropping depends principally upon the fineness of the point of the dropping tube and the freedom of the air's access through the longer tube, any desired rapidity of flow can be obtained by varying the size of either tube. It is more advantageous to use the same dropper and to regulate the air supply by plugging more or less loosely the upper end of the air tube with an appropriate stopper.

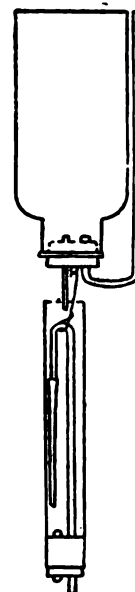
So much for the water supply. In order to convert this into an intermittent washing stream it flows into a tube suspended below, provided with a capillary siphon tube within, whose longer limb passes through a stopper at the bottom of the outer tube, something like the Adams fat extractor.

To make this part of the apparatus, cut the bottom off of a test tube fifteen mm. in diameter and fifteen cm. long, close one end with a rubber stopper with one hole, and within the test tube put a three mm. tube bent double by a sharp curve, with one limb about fifteen cm. long and the other about three cm. The longer limb passes through the hole in the stopper at the bottom of the test tube, while on the shorter limb is put a piece of rubber tubing of variable length, according to the quantity of water that is to be siphoned off at each delivery. To the loop of the siphon fasten one end of a short wire, whose other end terminates in a hook to catch in a wire eye inserted in the cork of the inverted bottle.

Thus suspend the siphon apparatus to the water supply, having the dropping tube inside the test tube. When the water is allowed to drop the test tube slowly fills, until the water, rising in the siphon's short arm, passes beyond the bend and siphons over. The operation then repeats itself.

The speed of dropping from the reservoir must be such as to allow each siphoned portion to pass completely through the filter before the next flows on. And the quantity which siphons over each time is to be regulated by varying the length of the rubber tube which extends from the short limb of the siphon. The lower end of this rubber tube is cut off diagonally to insure complete emptying of the siphon at each delivery.

These things once arranged, they need little attention afterwards.



### A Cheap and Useful Form of Apparatus for the Gravimetric Determination of $\text{CO}_2$ .\*

By J. H. HOSEASON.

It must have occurred to all who have had occasion to employ any of the usual contrivances for the gravimetric estimation of  $\text{CO}_2$ , that the proportionate weight of instrument to substance is much too large for very accurate determination, especially when the quantity of  $\text{CO}_2$  present is in small ratio. Most of these appliances are extremely fragile, and, moreover, expensive, disadvantages which do not apply to the one which I describe and figure.

**To Make the Apparatus.**—Draw off  $2\frac{1}{2}$  or 3 inches from the top of a  $\frac{3}{4}$  inch or 1 inch diameter test tube, and while hot round the bottom by gently blowing into it, A. Fit with a perfectly sound cork, E, perforated by two holes of adequate size, through which the tubes B and C (to be subsequently described) should pass, air-tight. The tubes B and C are made by slightly drawing out at the center 4 inches of glass tubing ( $\frac{1}{3}$  inch diameter), then cutting exactly in two; join each of these to tubing having about one-third of its caliber; bend one of them S shape, as shown in B. A small plug of absorbent cotton is placed at the bottom of B, which is then nearly filled with granular calcium chloride, and finally closed by means of a perforated cork, E, through which passes a small piece of tubing drawn out to a capillary. B constitutes the drying tube. The tube C, when finished, is not unlike a syringe in appearance. It is fitted with a perforated cork, E, through which passes the piston D. This should work loosely in E. The piston D is made from some of the thin tubing by drawing to a point, then sealing both ends. On the pointed end is placed a piece of indiarubber tubing, F. By heating the rod before attaching the rubber, the latter will be cemented to the former. A perfect valve is thus formed when D is firmly pressed into C. A copper wire, W, is useful to hang the apparatus on the hook of the balance.

**To Use the Apparatus.**—Slide up the cork E''', press D well home, and fill two-thirds of C with 40 to 50 per cent.  $\text{H}_2\text{SO}_4$ ; replace E'''; then proceed as with the other instruments.

In bringing my adaptation of the same old principle before you, I may state that its special advantages are: It is light, weighing from 5 to 6 grammes, whereas the instruments of Schrotter, Rohrbeck, Rose, and Geissler average from 20 to 30 grammes; it is inexpensive and simple, costing at a maximum 2d., a little time and manipulation; the aforementioned cost from 2s. 6d. to 4s. 6d. each. It is scarcely necessary for me to point out the advantages accruing to the student who endeavors to make his own apparatus, and I think the youth who does so gets a better grasp of the principles underlying his work—a point which I am afraid is sadly overlooked in the teaching of chemistry, and also other subjects.

\*Presented at the meeting of the British Pharmaceutical Conference.

Personally, I have found this arrangement to be cleanly and accurate.

### A Wash-Funnel for Oxidizable Precipitates.\*

By J. A. FORRET.

In the *Pharmaceutical Journal* of September 19, 1891, I described a wash bottle for washing readily-oxidizable precipitates, which piece of apparatus answers perfectly for precipitating oxidizable salts produced by double decomposition. I required, however, a more rapid and thorough elimination of the soluble salt than is obtainable by that means, and have found the funnel arrangement now described suitable for that purpose.

The funnel A is fitted with a perforated metal cone, and covered with a circular piece of wood carrying three glass tubes (B, C, and D), to which are attached indiarubber tubes furnished with spring clips. The wooden cover has also a glazed aperture as large as the diameter of the funnel will admit, to enable the operator to see the contents of the funnel. To the stem of A is fitted a piece of india rubber tubing (F), into the other end of which a short glass tube is inserted; underneath is placed a beaker or basin of convenient size containing water, under the surface of which the glass tube dips. Into the tube D the stem of a second funnel (E) is inserted; both funnels are conveniently supported in the rings of a retort-stand.

The apparatus is used in the following manner: A piece of fine calico is placed inside the metal cone, and the wooden top cemented to the funnel A by means of almond meal made into a stiff lute with water to which a little glycerin has been added. The tube D is closed, and a current of coal gas, carbonic anhydride, or other suitable gas is passed through the funnel by the tubes B and C, to displace atmospheric air. The precipitate to be treated is poured into the funnel E, and by means of the clip at D rapidly transferred to the funnel A. When the bulk of the water has passed through the funnel, the tube F is closed by a clip, and the funnel A filled with boiled water through the funnel E. After the lapse of a few minutes the water is run off and the operation repeated till the precipitate is practically free from soluble salt. The tube C is now closed and the precipitate allowed to drain.

It is desirable to maintain a gentle current of gas while the washing is being carried through; and when the tube C is closed, the resulting pressure guards against the entrance of atmospheric air through any flaw in the connections.

Ferrous carbonate is the only salt I have had occasion to treat in this way, the wash-bottle referred to being used to precipitate the carbonate. With some slight modification of the funnel A, however, I believe the above arrangement could be conveniently used both for precipitating and washing such unstable salts as ferrous carbonate, ferrous phosphate, etc.

\*Presented at the meeting of the British Pharmaceutical Conference

*Written for the American Druggist and Pharmaceutical Record.*

## TIPS ON ADVERTISING. XI.

By CHARLES NELSON,  
San Francisco, Cal.

In advertising a retail drug store, the proprietor should make use of the following methods:

### NEWSPAPER ADVERTISING.

Dwell particularly on the necessity of obtaining pure drugs, that life sometimes depends on it, on

### LIFE IS A LOTTERY

Perhaps, but you can't afford to take any chances when you're sick. Don't let the druggist enrich himself at your expense. Look out for impure drugs. They are cheaper of course—for the druggist—but how about you? Then again how about accuracy and skill in compounding your prescription? That counts for something too, don't it? We pride ourselves on combining all these features.

CHAS. NELSON & CO.,  
Reliable Druggists,  
SAN FRANCISCO, CAL.

your skill and accuracy in compounding prescriptions. I give an illustration of this style of announcement herewith.

Call attention to your stock of druggists' specialties, toilet requisites, soda fountain, etc., taking up

### IN BUYING A SPONGE

Don't sponge on your health—that is, don't select a poor one, and thus cheat yourself out of the benefits that a good sponge would bestow upon you. We confess we do not know much about poor sponges—we do though, know a lot about good ones, and our knowledge is yours for the asking.

CHAS. NELSON & CO.,  
Reliable Druggists,  
SAN FRANCISCO, CAL.

some specific article and giving a little history or description of same; take, for instance, a sponge.

Wrap up with every package a dainty printed slip dwelling on some feature of your business; for instance, bringing to notice some new brand of perfume or sachet, giving a complete list of all mineral waters to

be obtained at your store, calling attention to my soda fountain, etc. For variety's sake I would alternate this by giving little household hints; in Winter, for example, some simple method of preventing and curing chapped hands, etc.

It is a good idea to use a certain color of wrapping paper exclusively, also to have the labels and cartons of all goods put up by you of the same color. People would gradually associate this color with your store and it would furnish you with a standing advertisement; the store front should be painted of the same color.

It is best to make prominent the fact that you keep for the convenience of the public a full line of postage stamps, stamped envelopes and postal cards, also a telephone and directory.

I should endeavor to originate some distinctive trademark and identify it with all my labels, announcements, etc. That of the Owl Drug Co., San Francisco, will serve as a good example.

I should make prominent the fact that I was ready for call, night as well as day.

I should, if in a fair location, invite people to step in and wait for the car, etc., irrespective of their purchasing anything or not.

One should endeavor to observe originality in window dressing, aiming to have the window different

### EXTREMES MEET SOMETIMES.

They always do at Chas. Nelson & Co.'s drug store. Hot drinks in cold weather—cold drinks in hot weather. Just now the thermometer is down, and you will find our Hot Lemonade, Hot Soda, Hot Clam Juice, very grateful; or, if you want the latest, step in and try our

ANTI-FREEZE  
NECTAR.

from anybody else's. A mortar used in olden times, a sponge in its crude state, etc., would occasionally prove useful and attractive for this purpose.

Make special features for your soda fountain, observe timeliness of season with regard to hot and cold drinks, also issue tickets, whereby those buying a dollar's worth would obtain them at a reduction; thus, by oftener frequenting your store you could become better acquainted with the customers, and your chances of selling them something else thus increased.

Offer free medicine to the needy poor between certain hours, if their applications be indorsed by some reputable physician or other person.

Endeavor to note the arrival of new physicians and send them at once a pad of recipe-blanks with their name on as well as your own; also, if circumstances permit, make a personal call.

If I depended entirely on my sale of patent remedies (viz., having no physician's prescription trade at all) I should have a doctor in attendance, at certain hours, to give free advice to those who wished it.

There are of course, other methods that can be suc-

cessfully employed, depending somewhat on location and local circumstances, but I believe a faithful adherence to the above suggestions will boom in a legitimate way the business of any drug store.

### A SYSTEM OF ADVERTISING.

By SAMUEL J. PLATT,  
Oakland, California.

My system for advertising a retail drug business is as follows:

1. Keep the best drugs and goods my skill, judgment and money can buy.
2. Keep everything clean and attractive. Have fine fixtures.
3. Exact of employees and myself practice the utmost courtesy toward all coming in my store.
4. If in a large city study especially the territory tributary to my store, specially adapting my business to wants of probable customers.
5. 365 days in the year take special pains to please the ladies.
6. Have something to interest customers waiting for prescriptions, etc.

S  
P  
O  
N  
G  
E  
S

The kind that  
will wash  
and wear

At  
Hay's  
Pharmacy  
this week.

7. At least twice a year have days in the nature of opening days. Attention called to the same by newspaper and circular advertising.

8. At least four times a year have a general distribution of circular matter, thoroughly covering my territory, matter neatly put up in envelopes and as far as possible addressed to the heads of families.

9. In spite of the evils of cutting, make a judicious selection or use of newspaper, circular and sign advertising afforded by patent medicine and other people who advertise to the consumer.

10. Study my city and adjacent territory and myself manufacture one or more preparations specially adapted to the wants of the people, advertising the same by samples, circulars, signs and newspaper advertising. I would try to have an article or articles better than people could get any one else. It or they would make my name known.

11. In large cities bill boards generally cost more than they are worth. In smaller places make a judicious use of prominent and permanent locations.

12. Make friends of newspaper-men, giving tips for news items whenever not interfering with the confidential relations of druggist to customer.

13. Pay special attention to window displays. Try

each week to have something worthy of newspaper notice, paying for all notices reciprocity of the newspaper men did not secure. From time to time allow people to exhibit articles in window, thus securing many notices. *My point.* Effect of window display emphasized by newspaper notice.

14. Use newspapers constantly.

Keep display add running all the time, varying size

## SEGNOPS

looks queer, but we have only spelled sponges backward to interest you.

We have done more than this at our store to interest you. We have converted our windows into a curiosity shop. The greatest curiosity is how some of the Sponges are sold so low.

**H. H. HAY & SON,**  
MIDDLE STREET.

just as newspapers vary in size—progressive, modern papers.

Use local notices judiciously and plenteously, striving to have them take the form of news items. All advertising to form one complete whole. A certain per cent. of receipts to be set aside for advertising.

The main and constant purpose is to get people to come to my store.

all sizes SPONGES all prices

SPONGES

SPONGES

SPONGES

SPONGES

SPONGES

good value SPONGES in all grades

SPONGES

**Hay's Pharmacy.**

In all advertising impress upon the minds of the people

1. My skill.
2. Purity and extra quality of goods.
3. Reasonableness of my price.
4. Proper treatment of customers.
5. People can do better at my store than anywhere else.

# COLUMBIAN EXPOSITION

## Mines and Mining Building.

(Continued from page 163.)

Canada also makes an excellent display in this building. Kaolin occurs of various colors, blue, white, and brown, and in the lump and powder forms; also graphite which is to be seen in large lumps or

which is manufactured from it. This ore contains from 60 to 80 per cent. of alum which is extracted from it by roasting, lixiviation, and crystallization. Other minerals displayed are chrome-iron ore from which chromium is extracted, manganese ores, crude asbestos, a number of ores yielding silver, such as argenti-

ferrous sulphate, chloride, nitrate, acetate, oxide etc.

The only portion of the exhibit of England which merits attention are the displays of Fullers earth in lumps and powder and in small sacks and fancy pasteboard boxes.

Mexico is well represented by mineral

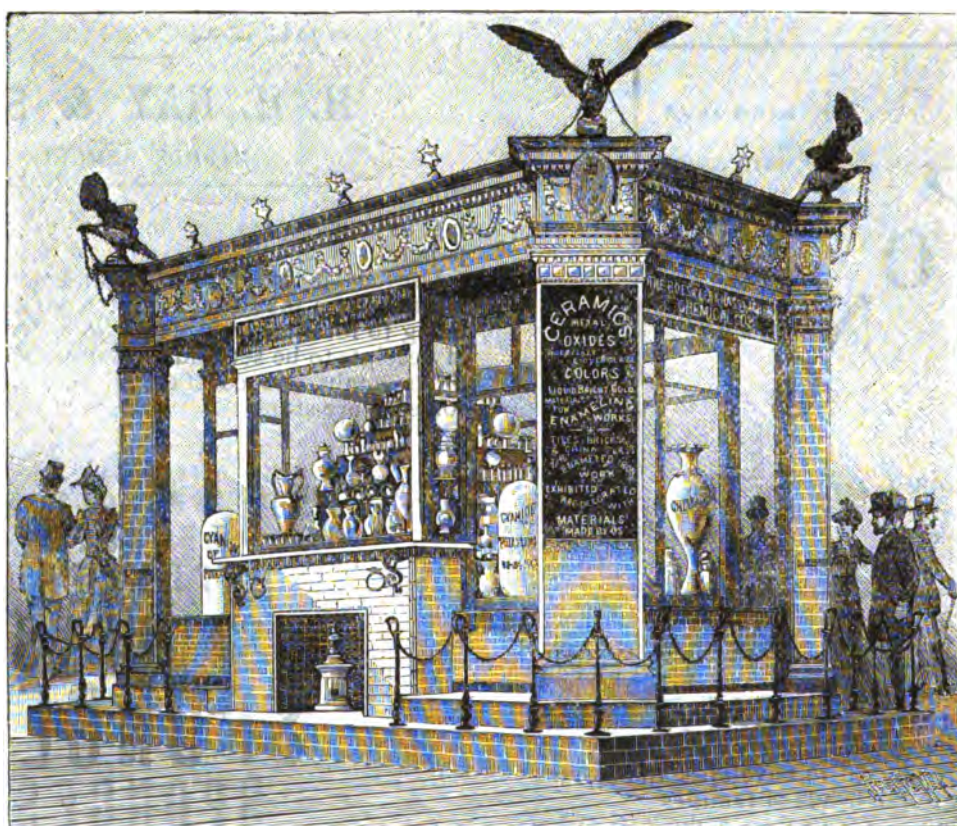


EXHIBIT OF THE ROESSLER & HASSLACHER CHEMICAL CO.

masses on the floor, and in smaller pieces in cases which also contain the powdered article in jars, and also lead pencils. Iron and antimony ores and masses of steatite and soapstone also abound here. Among the curiosities in the pavilion is an ingot of nickel weighing 4,500 pounds. A Montreal firm is represented by a barrel each of potash and pearlash. No less interesting than the other portions of the exhibit is the display of crude petroleum and its various derivatives, ranging from lubricating oils down to paraffin and paraffin candles.

New South Wales is also well represented by mineral products. Masses of alumite are shown, and also the alum

ous galena, argentiferous shale, argentiferous quartz, auriferous mispickel, etc.

The exhibit of Austria consists largely of mineral waters and salts. This country is represented by Bilin water from Bilin, Bohemia; Franz Josef water from Budapest; Levico water, containing arsenic and iron; Hunyadi Miklos water, and others. Carlsbad Sprudel water and the salt are also on exhibition.

The exhibit of France contains nickel ore from New Caledonia, which is in green chunks marked with brown cobalt ores; also metallic cobalt and nickel, the latter in rolls, grains, small cubes, etc., also various salts of nickel and cobalt as the oxalate

products, but unfortunately all the labels are in Spanish. However the following are easily recognized: crude asbestos, marble, onyx, opals, silver and copper ores and crude copper sulphate.

The balance of the main floor is devoted to the individual exhibits of the States of the Union, and it is hardly necessary to describe each pavilion in detail. Coal is a mineral product which occurs in the majority of the pavilions; onyx, a product of many Western States, is represented in several pavilions; iron ores occur in abundance; silver ores abound in the exhibits of the western ores; gold nuggets and ores are also among the curiosities displayed by

the Western States; zinc ores are shown by Wisconsin and Missouri; copper and copper ores by Michigan; phosphate rocks by the Southeastern States, and so on the list might be multiplied.

The gallery should be visited by every one entering the building, as it contains a great number of interesting things.

The Roessler & Hasslacher Chemical Co. displays a case containing potassium cyanide in original tin cans of 112 pounds each, also in tall inverted glass jars, in small cans and in wide mouth bottles, and also red and yellow prussiate of potash and potassium permanganate. This enterprising firm also has an exhibit of ceramic colors on the main floor of the building.

Batelle & Renwick, of New Jersey, show crude potassium and sodium nitrates, the former, also in the refined state, in remarkably large crystals about one foot long, sulphur in masses and powder, etc.

The Welsbach Light Co. has a very interesting exhibit prepared by Waldron Shapleigh which consists of a case containing a large array of salts of the rare metals. Among the metals represented are neodymium, praseodymium, erbium, yttrium, thorium, lanthanum, cerium, and others. The most noticeable feature of these compounds is the peculiar and marked colors.

A number of mineral waters are shown on this floor; for instance, the Manitou and Saratoga Lithia. An interesting display in this connection is that of all the mineral waters in the United States. The exhibit is arranged on shelves to form steps, and does not consist exactly of water, but simply of the peculiar styles of bottles used as containers, each adorned with the characteristic label used by the mineral water firms. The number of bottles displayed is 151.

The exhibit of Ward's Science Establishment, of Rochester, N. Y., occupies more space than any other exhibit in the gallery, for it occurs on both sides of the gallery. Among the interesting things displayed are models of crystals. The remainder of the exhibit consists of ores arranged according to composition, oxides, carbonates, silicates, etc. The entire exhibit is exceedingly large and would reflect great credit on any institution.

In the German section is an exhibit of paraffins and mineral oils, also such compounds as meta-ortho and para-cresol, red oil, carbolic acid, benzol, lutidine, picoline, etc. The German Kali Works have a small exhibit in this section similar to the one in the Agricultural Building.

The largest and most handsome and imposing exhibit is that of the Standard Oil Co. This consists of pure white show cases of deep style with tall glass jars containing various kinds of petroleum and all its products. The cases containing benzine, gasoline, etc., are specially attractive owing to the refractive power of these liquids. The exhibit is faced on all sides by white pillars.

(To be continued.)

## CORRESPONDENCE.

### Dispensing by Physicians.

To the Editor of the AMERICAN DRUGGIST.

Sir: I have been reading your interesting journal for the past year with great satisfaction. But there is one point I wish

you would touch upon, and that is: What is to be done by the pharmacists of the country to head off the practice of physicians dispensing their own medicines? This to my mind is as great an evil as the cutting in patents, yet it is a subject rarely or never touched by pharmaceutical writers. It is a crying evil and needs correction as much as any that threatens the stability of retail pharmacists. Competition if legitimate is all right, but I venture the assertion that not one druggist in a thousand can stand it if both sources of revenue—patents and prescriptions—are cut off. I notice that a great many pharmacists are writing of the advisability of introducing a ten cent counter (that is certainly humiliating and does not speak well of our boasted progress in the art), whilst others are worrying over the prices to be charged for prescriptions. The latter seems mockery to the thousands of druggists situated as myself. There is only one choice left that I can see, and that is to go into a general store business. Circumstances are surely making the retail drug business a thing of the past, and



JEAN MARTIN CHARCOT.

the future druggist to be successful financially must come down to the plane of ordinary business or get out of the profession. Can you offer a solution to this vexing question? C. E. B.

### On a Uniform Prescription Price.

To the Editor of the AMERICAN DRUGGIST:

SIR: The article of Geo. Cutts on uniformity of prices for prescriptions covers the ground fairly well, and leaves but little more to be said.

It is my opinion, however, that any attempt to establish a uniform scale for the entire country would fail for many reasons. Among these may be named: Expense of conducting store, locality, an article which may be frequently used in one section and seldom in another; quality of goods dispensed. These are all factors which must be considered. Then again, the affixed price may be an extortion (and such things do happen), would it be fair to your customer to perpetuate the extortion? Would any sense of fealty to the "other fellow" justify this? Then, again, one pharmacist may be scrupulously exact in

his preparations, dispensing nothing but the highest standards of quality, while his nearest neighbors and competitors are dispensing P. D. Q. fluid extracts, tinctures, cheap fluid extracts and drugs generally. Would not this conscientious pharmacist suffer by this uniform scheme?

So far as we are concerned in this locality, and this will hold good in all Indiana cities where local organizations exist, as well as among the members of the State association, we have for the past ten years used a uniform price mark for all pocket prescriptions. This was started in Evansville in 1882, and we have found it to work very smoothly. It would probably work well to adopt such a scheme in different sections of the country. This, however, is hardly to be expected, for it would first be necessary to organize, and that seems impossible. The American pharmacist, well—he is great on theories and ideas and makes many resolutions, but never has the grit to carry them out. There are many evils which bear down on him, but lacking the gift of close organization he bears them with a meekness that no other profession would. He might profitably learn a lesson or two from the bricklayer.

LEO ELIEL.

SOUTH BEND, INDIANA.

## OBITUARY.

JEAN MARTIN CHARCOT.

Jean Martin Charcot, the great French *savant* who passed away at Morvan, France, about the middle of August, was born in Paris in 1825 and was thus 68 years of age at the time of his death.

The name of Professor Charcot is known throughout the civilized world in connection with the modern discoveries in the pathology of the mind and nervous system. Speaking of him in the French paper *L'Illustration*, a recent writer dwells particularly upon this, remarking that he made a most profound study of and practically created that new classification in pathology popularly known as locomotor ataxia aphasia, illusion, and nervous disorders of a high grade.

In concluding with a reference to the famous school of Salpetriere, allusion is made to the permanent distinction which "this celebrated *savant* with Cæsarian profile, bright eye, strong lip and genial expression," has by the formation of the school added to the scientific reputation of the French nation. The great teacher was very popularly known through his researches in the domain of hypnotism and allied neurological studies.

PHILEMON E. HOMMEL.

Dr. Philemon E. Hommel, a prominent member of the New Jersey Pharmaceutical Association, died at his home in Jersey City on Thursday, September 14, at the age of 57. Dr. Hommel was a native of Alsace. His grandfather and father were pharmacists, and he followed them and studied at the *Ecole de pharmacie*, Paris, and was for several years apothecary at the famous hospital, Hotel Dieu. He had contributed several papers to the proceedings of the New Jersey Association during his connection therewith and one on "Oleum Etherum" appeared in the PHARMACEUTICAL RECORD of November 3, 1892. He is survived by three sons and three daughters.

## With the Advertisers.

### Norwood's Hydrobromate Caffeine.

The Smith-Kline & French Co., wholesale druggists, Philadelphia, have just put on the market Norwood's Granular Effervescent Hydrobromate of Caffeine, 10 cent size, for which the point is made that it is a package larger in size, better in quality, and handsomer in appearance, than any other 10 cent package of this, or a similar preparation put on the market up to the present time.

The granules in this preparation of theirs are a good size, and are not the siftings which are found in most other 10 cent preparations of a similar character. Their package measures  $3\frac{1}{2}$  inches in height,  $1\frac{1}{2}$  inches in diameter, and 5 inches in circumference. Each bottle is handsomely wrapped in a colored wrapper, said wrapper being printed in black ink with a red border, which makes a very showy and attractive package.

The Smith-Kline & French Co. will be pleased to quote prices on the above preparation, upon application, put up under the name of Norwood's.

Put up with the purchaser's name, business and address at the bottom of the label and with his name at the top of wrapper and his name, business and address at bottom of wrapper in full gross lots; also in one-half gross lots. They do not put up less than one-half gross under the purchaser's name.

They inform us that they will mail (postage prepaid) one-twelfth doz. bottles of Norwood's Hydrobromate Caffeine, 10 cent size, to any reader of the AMERICAN DRUGGIST who will send them his business card, label, or letter-head, inclosing 10 cents in stamps.

### Chocolate Bon-Bons.

The Walter M. Lowney Co., of Boston and Chicago, make a specialty of chocolate confections for the drug trade. Druggists who carry a select line of confections would do well to stock the preparations of the Walter M. Lowney Co., for which the makers claim special superiority. A card to the firm at their Boston office, 97 to 107 Pearl street, or to the Chicago office, 279 E. Madison street, will bring a catalogue and price list containing full particulars of these and other goods. Mention the DRUGGIST AND RECORD.

### Creasotal in Tuberculosis.

Creasote carbonate is destined to supplant creasote in the treatment of tuberculosis in a very near future.

The extremely favorable and quick action of creasote carbonate in the treatment of tuberculosis, has recently been demonstrated by Dr. Edmond Chaumier, of Tours, France, in a paper read before the Academy of Medicine at Paris (*Deutsche Medicinische Wochenschrift*, 1893. No. 24, 25). He stated that with the creasote carbonate treatment a girl, fifteen years of age, gained eight pounds in weight within two months, and a young woman of twenty

years, under the same treatment, gained thirteen pounds in two months' time.

Creasote carbonate is administered either pure or in capsules, or mixed with four to twelve parts cod liver oil, or as an emulsion of one-half to two teaspoonfuls beaten up with the yolk of an egg, diluted with water, sweetened and some aromatic added, and administered in several doses.

Write Schering & Glatz, New York City, mentioning this paper, for further testimonials of its therapeutic value.

### A New Shampoo Bib.

One of the new articles made by the Tyer Rubber Co. is the "Barbers' Shampoo Bib." These convenient little articles are made out of pure sheet rubber and have a hole in the center which can be stretched large enough to slip easily over a person's head and then contracts around the neck. By means of this barbers can



give their customers either a hair cut or shampoo without soiling their shirt or collar. They are inexpensive and articles which druggists can handle conveniently with other goods of rubber. The accompanying cut illustrates its general appearance; prices can be obtained by addressing the makers, the Tyer Rubber Co., Andover, Mass.

### An Antikamnia Campaign.

The Antikamnia Chemical Company are again giving evidence of the vitally progressive character of their business activity. They have just brought themselves into still closer touch with the profession by bringing to its notice in a salient and forceful manner, their entire list of preparations. To specify succinctly, we quote from their circular letter: "In response to general approval, and to meet the additional requirements of the practitioner, besides antikamnia in original powder form, our list now includes: one grain, two grain, three grain, five grain and ten grain antikamnia tablets. Also, combination tablets of antikamnia and quinine containing  $2\frac{1}{2}$  grains each of antikamnia and quinine sulphate; and combination tablets of antikamnia and salol containing, in like manner,  $2\frac{1}{2}$  grains each of antikamnia and salol."

It is perhaps hardly a necessary caution on our part, since dealers have long since learned to feel by instinctive impulses in the demand, whenever the

company is stimulating its trade, and consequently will hardly need the advice we now give.

Nevertheless we frankly say to all retailers, you may certainly expect from their present work a great impetus, and you will do well to set your houses in order, by stocking up at once.

### Scientific Advertising.

Dr. A. E. Dickinson, manager of the Cudahy Pharmaceutical Company, has contributed a paper bearing this title to the *Western Advertiser*. The paper is reprinted in a recent issue of *Printer's Ink*, which is a compliment not always accorded to writers from the pharmaceutical standpoint, though the "Little School-master" very frequently borrows a good thing from the AMERICAN DRUGGIST.

Referring to his method of introducing the products of the Cudahy Pharmaceutical Co., Dr. Dickinson goes on to say:

"Our line being new, I endeavor to make our name, products and capacity better known than to give the therapeutic indications of all or any of our articles. We are thus brought prominently before the class we aim to reach, through the medium of medical and pharmaceutical publications."

Stress is laid upon the fact that results are looked for in advertising even by houses of the size of the Cudahy Pharmaceutical Company. The careful insertion of each advertisement provided for, its every appearance checked and all little details thought of, as if the very existence of a great plant with almost unlimited capital, buildings covering  $23\frac{1}{2}$  acres of ground, with a pay roll of 2,500 men, 25 great managing departments, branches and correspondents in almost every center, and an annual output of \$25,000,000, was dependent on the advertising of the Rex Brand Beef Extract, of which they have a capacity to make 200,000 lbs. per annum, and also some 30,000 lbs. of pepsin and its compounds, which can now be found in some 50,000 drug stores in the United States.

### Hot Soda.

A few weeks more and "hot soda" will again be the popular beverage. In view of this it will be well for druggists to examine into the condition of their fountains and make the necessary preparations for dispensing the seasonable drinks. In this connection the catalogue of the Low Art Tile Co., is timely and opportune. In their circulars the point is made that the Low Art Tile Co. are independent; they do not belong to the Trust and can therefore make their own prices and terms. The following claims of superiority over all other fountains are made: The Low Art Tile Fountains are acid proof; they never change color; they consume less ice; draw the coldest soda; do not sweat, and lastly are easy to keep clean.

The Low Art Tile Co. issue a handsomely illustrated catalogue which any druggist can obtain by addressing the firm at 51 Portland street, Boston, and mentioning this paper.

# American Druggist and Pharmaceutical Record.

A JOURNAL OF PRACTICAL PHARMACY.

VOL. XXIII. No. 14.

NEW YORK, OCTOBER 5, 1893.

WHOLE No. 267.

## AMERICAN DRUGGIST PUBLISHING COMPANY.

37 COLLEGE PLACE, NEW YORK.

A. R. ELLIOTT, PRESIDENT.

Subscription Price—For the United States and Canada, - \$3.00  
If paid in advance direct to this office, 1.50  
" " for Foreign Countries, - - - 2.50  
Single Copies, - - - - - .15

The "American Druggist and Pharmaceutical Record" is issued on Thursday of each week. Changes of advertisements and all copy for publication should be received before Tuesday of each week.

We are not responsible for any money paid to agents. All remittances should be made direct to this office. Express Orders, Post-Office Orders and Drafts on New York should be made payable to the "American Druggist Publishing Company" and addressed to them at 37 College Place, New York.

*Liberal Commissions to Club Agents.*

## PHARMACY IN IOWA.

SINCE the appearance of our remarks on the status of pharmacy in Iowa, we have been gratified to note a disposition on the part of those most nearly concerned to institute an inquiry into the condition of the profession in that State, with particular reference to the existence of abuses in connection with the illegal sale of liquors. Indications of this are evident in recent reports of prosecutions brought by the local authorities against individuals who have been charged with conducting liquor saloons under the appearance of pharmacies; and it is hoped, for the good name of pharmacy, that the persons so charged will be discovered for what they are. In the newspaper reports of these cases we have failed to find any mention of the Iowa Commissioners of Pharmacy, but it is unlikely that they have remained idle in the matter. The annual reports of the Commission are usually distinguished by evidences of careful preparation, its members being equally jealous with the pharmacy boards of other States in the maintenance of a high professional standard among all coming under their authority; and as this implies, with other things, the correction of abuses, or at least the notification of their existence to the proper authorities, we shall look in the next annual report of the Iowa Commissioners of Pharmacy with some degree of interest for appropriate mention of their work in this direction.

IN an article on the "Valuation of Pepsin," which appears on another page, PROFESSOR BARTLEY mentions a hitherto unobserved peculiarity in the egg of the domestic hen. He states that he found white shelled eggs to contain only 10 per cent. of combined albumen and globulin, while the brown shelled variety contained as much as 13 per cent. This should have considerable bearing on the question of the relative digestive strengths of different pepsins, since it is practically impossible to state the conditions under which many of the published estimations have been carried out.

## REGISTRATION IN PHARMACY IN NEW YORK STATE.

THERE exists an erroneous idea among many pharmacists in New York City that the New York City Board license is not accepted by the State Board, and at the request of DR. WM. BALSER, secretary of the City Board, we take pleasure in calling attention to chapter 361 of the laws of 1884, paragraph 14 (as amended by L. 1887, ch. 676) which reads as follows:

This [the pharmacy] act shall not apply to the counties of New York, Kings and Erie, provided, however, that a license as a pharmacist, granted any person, after an examination by any board of pharmacy legally created under the laws of this State shall entitle said persons to a license, or a certificate of registration as a pharmacist, from any board of pharmacy legally created under the laws of this State, upon presenting to such board his said license and complying with the formal requirements of said laws.

It will be observed, however, that this interchange of registration holds good only where candidates have been registered on examination,

MICROSCOPY is rapidly gaining the recognition which its importance deserves in the pharmaceutical curriculum. As a means of detecting adulteration in vegetable drugs its superiority is unquestioned, and we take pleasure in directing attention to the excellent and profusely illustrated article on "Starches in Root Drugs" on pages 182 to 188 of our last issue, which is a most valuable contribution to the literature of the subject.

FORMERLY we traveled by coach and sail, read our news in weekly and our science in monthly journals. Now we travel by rail and steam, get our news in morning and evening papers, and our scientific reading in weeklies. Are you behind the age? Still using coach and sail, trusting to monthly papers for your scientific reading? Or do you keep up with the times by reading the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD the only weekly drug journal on this continent?

## VALUATION OF PEPSIN.\*

BY E. H. BARTLEY, B.S., M.D.,

Dean of and Professor of Chemistry in the Brooklyn College of Pharmacy.

The last edition of the Pharmacopœia requires that a pepsin shall be capable of digesting not less than 3,000 times its own weight of freshly coagulated and disintegrated albumen when tested by the process described in it and that saccharated pepsin shall digest 300 times its own weight of freshly coagulated and disintegrated albumen. The process given there is as follows: An egg is boiled in water for fifteen minutes, cooled, opened and the coagulated albumen separated and rubbed through a sieve of 30 meshes to the linear inch, rejecting the first portion passing through. Ten grammes of this disintegrated pepsin are weighed off for the experiment. A digesting fluid of acidulated water and pepsin is then added and the material is to be shaken every 15 minutes for six hours. At the expiration of this time the albumen should have disappeared; *i. e.*, it is in solution. The description of this process, as given in the U. S. P., admits that trustworthy results can only be obtained when the contents of the flask are agitated uniformly and at regular intervals of time, *i. e.*, the whole attention of the operator must be given up to the test for a long period of time (six hours). The temperature of the bath must be carefully regulated during all this time, and the shaking must be accomplished with great care. Counting the time that it will take to prepare the albumen, at least three-quarters of an hour, the whole process will require about seven hours, or from eleven in the forenoon until six in the evening. It is very evident that the time required is too long and the care to be exercised is too great for the process to be often made use of by the pharmacist. In the valuation of pepsin it is important that uniformity of results should be obtained. It is a matter of surprise and regret that the Committee on Revision has seen fit to retain this somewhat unsatisfactory process.

There are a number of errors which have been before pointed out. It has heretofore been assumed that the white of egg prepared as above is uniform in composition. That such is not the case, the writer has proven by actual experiment. In making a quantitative estimation of the proteid materials in the whites of eggs, I found a variation of from 10 to 13 per cent. It will be noticed, on opening different eggs, that in some the so-called white is very thin and watery, while in others it is thick and ropy. The specific gravities of these will vary with the per cent. of dry albumen in solution. That is, the higher the specific gravity the greater the amount of albumen in solution. I found that in an egg with a white shell the amount of albumen and globulin combined was 10 per cent., while in a brown egg I obtained 13 per cent. Unless, therefore, a considerable number of eggs are taken, and the albumen coagulated from these is well mixed, uniformly concordant result cannot be expected, because the amount of albumen taken differs with the composition of the egg white. Again, in the comminuted state, the size of the particles has an important bearing upon the time of complete digestion, and upon the amount digested in a given time. As the digestion proceeds, the particles of disintegrated albumen agglutinate into masses, unless the shaking be almost constant. The frequency and the thoroughness of the shaking, then, will vary the result. Any attempt to work with solids in suspension must be unsatisfactory, unless constant agitation is secured. This requires some form of mechanical power, as no one could stand and

shake a series of flasks for six hours. If we can employ a *solution* of albumen in making the test, instead of the suspended solid, we may avoid the necessity of shaking. The reaction between liquids is always more uniform than between a solid and a liquid. In order, therefore, to improve upon the U. S. P. method, I have modified it by working with a *solution* of albumen. Here we may easily obtain uniform results. To do so, however, it is necessary to start with a liquid of uniform and constant composition. This can be accomplished as follows:

Several eggs are opened and the albumen thoroughly mixed, which can be done without difficulty. Starting then with this uniform egg white, we may weigh out any desired amount, mix it with 9 times its own volume of distilled water and boil for 5 to 10 minutes. We thus get a slightly turbid or opalescent solution. This solution is then brought to the requisite temperature, acidified, the pepsin added, and the temperature kept constant until the albumen is digested. The time of the disappearance of the albumen is determined by bringing a drop of the solution in contact with a drop of nitric acid. Albumen is coagulated by strong nitric acid. The acid does not coagulate peptone.

The time consumed in the digestion of a given amount of albumen is inversely proportional to the activity of the pepsin used. It is best in practice to so regulate the proportions of pepsin and albumen that the digestion will be complete in two hours, but not in one hour.

The method of procedure which I have adopted is as follows:

*Solution No. 1.*—Take the whites of several fresh eggs, mix them thoroughly, and to 100 grammes of the mixed egg albumen add 900 Cc. of distilled water, or in this proportion if smaller quantities are used. Mix the solutions well, and boil from 3 to 5 minutes. After cooling, make up the solution with water to the original volume. That is, add the water lost by evaporation during the boiling. Ordinarily, however, the loss is so slight that it may be neglected. The solution may be strained, if necessary, through fine muslin; but if the eggs are fresh only a slight coagulum will form during the boiling, and we will have a slightly opalescent solution of cooked egg albumen, containing 10 per cent. of egg white. As egg white contains, as an average, about 12.2 per cent. of dry albumen, 100 Cc. of this solution will contain 10 grammes of egg white, or 1.22 grammes of dry albumen.

*Solution No. 2.*—Weigh out one gramme of the pepsin to be tested, add to 25 Cc. of water, and then add 2 Cc. of diluted hydrochloric acid U. S. P. Now add water enough to make the solution up to 50 Cc.; or, if it be a high grade pepsin, make up to 100 Cc. after adding 4 Cc. of diluted acid.

*Procedure:* Measure out into a beaker or bottle 50 Cc. of the albumen solution, and warm in a water bath to 35° to 40° C. (95° to 104° F.). Now add to this solution 2 Cc. of diluted hydrochloric acid, U. S. P., and from one-half to five cubic centimeters of the pepsin solution. The more active the pepsin the less the quantity to be taken. In the valuation of high grade pepsins it is best to use 100 Cc. of albumen solution, containing 10 grammes egg-white, and 1 Cc. of pepsin solution, containing 0.010 grammes pepsin. It may sometimes be necessary, with an unknown pepsin, to perform a preliminary test to determine the approximate time, before spending too much time on an accurate test. It is best to so regulate the quantity of pepsin and albumen that the time shall be about two hours.

The time when the pepsin is added must be care-

\*Read before the Kings County Pharmaceutical Society, Sept. 12, 1893.

fully noted, and the temperature of the solution must be kept between 35° and 40° C. (95° to 104° F.). At intervals of 10 minutes, after the first hour, draw out a few drops of the solution with a nipple pipette (dropper) and float it upon a small quantity of pure nitric acid in a conical minim glass. The digestion is incomplete as long as a white zone of coagulated albumen appears at the line of contact of the two fluids. Note the time when the nitric acid ceases to give this coagulation. This end-reaction can generally be easily determined. We thus get three elements in the calculation of the digestive power of the pepsin, *vis.*:

The weight of the egg-albumen, A.

The weight of the pepsin taken, P.

The time consumed, T.

We next assume a standard time of three hours, the average time of stomach digestion; or, we may assume the arbitrary six hours of the U. S. P. This time seems irrational, and is longer than normal stomach digestion lasts. Hence I would advise the statement of the digestive power of a pepsin, to give the amount of albumen digested during three hours. The relation between the quantities of albumen and pepsin is expressed by the fraction:  $\frac{A}{P}$ , *i.e.*, it is found by dividing the amount of albumen, 5 grammes, in the above directions for weaker pepsins, by the amount of pepsin used when 1 Cc. of the solution above mentioned is taken for the test *vis.*, .02 Gr. This would give as the amount of albumen digested by one part of pepsin in the observed time of the experiment as 250 Gr. But the time is not the standard time. Assume that the time required for the digestion was 2 hours. The relation of this to the standard time, 3 hours, would be  $\frac{2}{3}$ . The above result must then be multiplied by this ratio in order to give the amount of albumen capable of being digested in the standard three hours. To put this in the form of an algebraic equation we have:  $D$  (digestive power) =  $\frac{A}{P} \times \frac{3}{T}$ . Substituting the above values we have:

$$D = \frac{5}{.02} \times \frac{3}{2} = \frac{15}{.04} = 375 \text{ grammes.}$$

That is, 1 gramme of this pepsin is capable of digesting 375 grammes of egg albumen in three hours, or 750 grammes in six hours.

As egg-white contains about 12.2 per cent. of dry albumen, 1 Gr. of this pepsin will digest 45.75 Gr. of dry albumen in 3 hours or 91.5 Gr. in 6 hours.

The advantages claimed for this process over the U. S. P. method are:

1. The shorter time consumed.
2. Uniformity in results.
3. The avoidance of the necessity for shaking the solution during digestion.
4. A more exact statement of results.
5. The weaker solution of albumen used gives less interference with the action of the pepsin by the peptone formed.

#### Fluid Extract of Belladonna.

In criticising the formula of the British Pharmaceutical Conference for "collodium belladonnæ" the critics suggested two formulas as follows for the preparation of the fluid extract which enters into the composition:

I. BY R. WRIGHT.

English belladonna leaves in fine powder... 1 pound  
Alcohol, a sufficient quantity.

Moisten half a pound of the powdered drug with menstruum, pack in a conical percolator, add a further supply of menstruum, allow percolation to proceed, and collect the percolate in three fractions of six fluid ounces each. Moisten the rest of the powder with a little of the first fraction of percolate, pack in a second percolator; pour over it the remainder of the first frac-

tion of the percolate, and when that is absorbed, add the second fraction, and finally as much of the third fraction as may be required to produce eight fluid ounces of percolate.

This fluid extract should contain not less than 0.5 per cent. alkaloid.

II. BY W. A. NAYLOR.

Belladonna leaves in No. 60 powder... 20 oz.  
Alcohol, a sufficient quantity.

Moisten the powder with 15 fluid ounces of the alcohol, pack it tightly in a percolator, and pour on sufficient menstruum to saturate the powder and leave a stratum above it. When the liquid begins to drop, close the lower orifice and macerate for twenty-four hours; then allow percolation to proceed, gradually adding menstruum until the belladonna is wholly deprived of alkaloid. Reserve the first seven ounces of the percolate, distil off the alcohol from the remainder, and evaporate the residue to a soft extract; dissolve this in the reserved portion and add enough menstruum to make the liquid extract measure 10 fluid ounces.

**The Estimation of Chlorine in Water.**—In analyzing a mineral water from Harrogate, containing only a small quantity of chlorine, a distinct difference in the amount of chlorine was observed according to the method used. In each case 500 Cc. of water was taken, and in titration with  $\frac{N}{10}$  AgNO<sub>3</sub> solution, potassium chromate was employed as indicator. Thus the chlorine stated in grains per gallon was:

1.34 by weighing as silver chloride.

1.44 by titration of the water concentrated to one-tenth.

1.66 by titration of the water not concentrated.

(This latter result bears out those obtained by W. G. Young and others.—*Analyst*, May, 1893.)

On repeating the experiments I came to the conclusion that some constituent present affected the results by titration. As this water is alkaline and contains 1.71 grains of silica in solution, and as I find that soluble alkaline silicates when present in small quantity interfere with Mohr's process for the estimation of chlorine, I am led to believe that in this case an alkaline silicate (or what is potentially the same, a solution of soluble silica in sodium carbonate) is the cause of the difference observed. The water in question has been fully analyzed, and does not contain any other substance likely to interfere with the process of titration.

—T. FAIRLEY in *The Analyst*.

#### Methods for the Determination of Boric Acid.

A. K. Reischle. (*Zeit. anorg. Chem.*, 1893, iv., 111, through *Chem. Zeit.*)—The author has made a comparative study of various methods of determining boric acid, including the following: 1. Weighing the basic acid as boric magnesium borate and determining the magnesia therein. 2. Ascertaining the amount of decomposition of a weighed quantity of sodium carbonate by the boric acid. 3. Distillation of the boric acid as methyl borate (Gooch's method) and weighing as basic calcium borate. 4. Volumetric methods. 5. Weighing as potassium borofluoride. 6. Volatilization as ammonium borofluoride and estimation by difference.

As a result of his investigation, the author concludes that in all cases where the bases present with the boric acid can be weighed as sulphates, the last appears to be the best plan, the boric acid being volatilized as ammonium borofluoride. The same method can frequently be used for the determination of free boric acid. When this process cannot be carried out, it is advisable not to rely wholly upon the other methods, but to check whichever may be used by the fluoride treatment, determining the total bases to be deducted in any convenient way.

## With the Advertisers.

### Parisian Toilet Soap.

This is the name of a new soap introduced into the American market by the well known perfumery house of Ed. Pinaud, Paris and New York. It is catalogued as "528" and is claimed by the makers to be the best value of any imported soap in the market. The quality is stated to be as fine as can be made, and the soap, being very highly perfumed and handsomely packed, should command an extensive sale. Each box is distinguished by a different odor, as White Rose, Violet, Marechale, Carnation Pink, Peau d'Espagne, Chypre, Jockey Club and Tris. A price list containing descriptions of the various perfumes and soaps imported by the firm will be mailed free on application to any reader mentioning this journal.

### End of the Fly Season.

By the time this issue reaches our readers the fly season will be practically over. The retailer, as a rule, has a quantity of fly papers left over. To insure its perfect condition next season and to avoid loss to their friends, the manufacturers of Tanglefoot have addressed a circular to dealers requesting them to look after their stock.

Full cases of Tanglefoot, according to the makers, will take care of themselves if kept level. Boxes and parts of boxes should be kept in a place of uniformly and moderately warm temperature and where they will not be disturbed needlessly; the cornice in the store or a high shelf in the storeroom would be admirably suited for this.

Tanglefoot keeps well in almost any condition, but if stored as above will keep with absolute certainty and without the loss of a single sheet to the dealer.

### Salable Specialties.

In connection with salable articles the firm of H. Planten & Son, New York, call attention to such universal standards as Planten's capsules of pure Para copaiba balsam, compound copaiba and cubebs (more generally known as Planten's black capsules) and pure sandal wood in 5, 10 and 15 minim sizes hard, and in 10 minim sizes elastic soft, which should be stocked by all druggists. H. Planten & Son make the point that all capsules of their manufacture will keep their shape perfectly when properly cared for, and druggists will not have the annoyance of returning collapsed capsules to the manufacturers for exchange. Planten's elastic soft and hard capsules of the same size and containing the same oils, etc., are invoiced at the same prices, so that druggists need not explain to questioning customers the reason (?) that forces them to sell hard and elastic capsules of other than Planten's make at different prices. Explanations sometimes are rather farfetched and more times very funny.

Such of the trade as wish to send out samples of Planten's capsules and perloids to physicians, should write to H. Planten &

Son, at their New York office, 224 William street, who will be glad to forward a supply to anyone mentioning the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD.

### New Nursing Bottle Brush.

Arthur W. Hahn, importer and dealer in druggists' glassware and sundries, 61 Park pl., New York, is introducing a new nursing bottle brush of the description outlined in the accompanying cut. The new brush



will doubtless prove very popular with the majority of customers, as it possesses many advantages over the ordinary style of bottle brush.

Druggists desiring samples should write to the sole manufacturer, Arthur W. Hahn, at the address given above, mentioning the DRUGGIST.

### Phenosalyl.

Dr. J. de Christmas, assistant in the Pasteur Laboratory, Paris, has made a study of the new products obtained by the combination of different antiseptics, and to him phenosalyl owes its origin.

Phenosalyl, a clear syrupy liquid, consists of a mixture of carbolic, salicylic and benzoic acids melted together and dissolved in lactic acid. The solution partially crystallizes at low temperatures, but if a small quantity of glycerin be added a clear solution is formed which does not again crystallize, is easily soluble in warm water, to the extent of 7 per cent. in cold water, and very soluble in alcohol and ether.

The results of bacteriological trials with the mixture have shown that it possesses an antiseptic power considerably superior to carbolic acid.

The results of experiments illustrate what is already well known, that the capability of resistance is very different in different forms of bacteria. The cholera spirals are the bacteria that offer the least resistance to the action of the antiseptic agent, as a solution of 1 per 1,000 is sufficient to destroy them. *Staphylococcus aureus* is the most resistant, and is also of greatest interest in surgery. A 1 per cent. solution

of phenosalyl is necessary to kill them while to attain the same result with carbolic acid it is necessary to expose them to the action of a 2½ per cent. solution for one minute.

Duloroy has also extended his experiments to the sterilization of instruments, gauze, and different organic substances like blood, the saliva of consumptives and decomposing urine.

Phenosalyl is manufactured by the Farbwerke vorm. Meister Lucius & Brüning, Hoechst-on-the-Main, and is sold in the United States by the sole agents, Schulze-Berge & Koechl, 79 Murray street, New York.

### Wanted! A Hundred Names.

Raymond & Co., of 62 Carroll street, Brooklyn, who are widely known as the makers of Raymond's Pectoral Plasters, are "in need of a hundred names of heads of families in your town." This announcement they have made repeatedly in the advertising pages of this journal. In return for a list of one hundred names made up from your books or from the directory, Raymond offers to send free of cost six Pectoral Plasters for Whooping Cough, and advertise your pharmacy extensively in the town. This offer applies only in towns where there are not more than fifty druggists, Raymond & Co.'s intention being to bring the local druggists prominently before the attention of probable customers. Further reference to this offer is contained in the advertisement of Raymond & Co., on page 1 of this issue.

### To the World's Fair.

All roads lead to—Chicago; at least they will this Summer, and will continue to until next November. But, then, there's a great difference in roads. Some people with time hanging heavy on their hands, and unthoughtful of the comforts and conveniences of travel, may say: "Any road, so that we get there." To such we have nothing to say, but address ourselves to the wide-awake business folks who have a true estimate of the commercial value of time, an adequate appreciation of the conveniences of modern methods of travel in their highest development, and are capable of knowing a good thing when they see it. To such is commended the admirable route via the New York Central & Hudson River Railroad. The "Central's" four-track, stone-ballast road-bed, insuring almost perfect smoothness of motion; its superb equipment in most approved and improved rolling stock; its admirable service rendered by trustworthy and obliging attaches; its maximum of speed combined with minimum of risk; its route through so many great centers of population, and so much of scenic attractions; all justify its claim of being the route par excellence to "The White City." Take the New York Central and be happy.

### Cudahy Pepsin.

The multitude of different pepsins thrown on the market during recent years has caused an increasing amount of attention to be given to the method of testing their efficiency by the profession, and the appearance of the U. S. P. for 1890 has been looked forward to as a final decision in the matter by those best qualified to decide. It is a gratifying commentary on the advanced methods adopted by our manufacturing chemists to find that the formula given in the U. S. P. of 1890 had already been in use for some time by the Cudahy Pharmaceutical Company.

It has generally been held that a method should be adopted which uses the same amount of acid as is found in the gastric juice, and which properly manipulated should develop the highest proteolytic power. In Roberts' "Digestion and Diet," 0.2 per cent. acid is shown to give the best results, and following thorough and careful tests The Cudahy Pharmaceutical Company adopted this standard over a year ago, while early in January, 1893, they adopted the exact formula now published in the U. S. P. As a matter of interest we give the formula of 1880 in comparison with that of 1890.

|                        | U. S. P.,<br>1880. | U. S. P.,<br>1890. | Cudahy.    |
|------------------------|--------------------|--------------------|------------|
| Albumen.....           | 10.0               | 10.0               | 10.0       |
| Acid, 32 per cent..... | 1.5                | 0.625              | 0.625      |
| Water.....             | 100 cc.            | 100 cc.            | 100 cc.    |
| Time.....              | 5 to 6 hours       | 6 hours            | 6 hours    |
| Temperature.....       | 100 to 400         | 100 to 104         | 100 to 104 |

The facilities of The Cudahy Pharmaceutical Co. are such that they are able to deliver the stomachs to the laboratory within a half hour after killing, the stomachs meanwhile having been on ice to prevent any opportunity for septic contamination. It is this immediate use of the raw material in connection with their advanced methods of manufacture that have rendered their pepsins and beef extracts so deservedly popular.

The Cudahy Pharmaceutical Company is a department of the Cudahy Packing Company, of South Omaha, Neb., recently instituted under the management of Dr. A. E. Dickinson.

### Druggists' Glassware.

Druggists are frequently at a loss regarding where to buy such articles of common use as homœopathic vials, glass syringes, glass tubing, besides the hundred and one other things of glass which are necessary accessories to a properly conducted drug store. The Standard Flint Glass Works, of 1120 to 1128 Charlotte street, Philadelphia, whose advertisement appears in this journal, make a special feature of the manufacture of homœopathic p. l. vials, screw cap vials, shell or tube vials, test tubes, glass syringes, jet cap syringes, wood-cased syringes, screw cap syringes, glass tubing and rods, and other apparatus and articles composed wholly or in part of glass tubing. The firm publish a comprehensive price list, which, with list of discounts, will be furnished on request to any person mentioning the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD.

### Paper Bottle Caps.

McKesson & Robbins, wholesale druggists, New York, have been appointed agents for America for Hunt's pleated

paper bottle caps. The bottle caps are supplied in colors of blue, green, gray, pink, purple, orange, red, yellow and white, and are packed in boxes of one gross, one color and size only in each box. The address of the purchaser can be embossed on the top or side of each cap in blue, black, or red (in lots of 25 gross or more), and this embossing is said to add greatly to the finished appearance of the cap. Hunt's pleated paper bottle caps are referred to as being very cheap, easily and quickly adjusted, and, while serving as a guaranty that the contents of the bottle have not been tampered with, give the neatest and best possible finish to the neck of the bottle. McKesson & Robbins invite such of the trade as have not used the caps heretofore to send in trial orders. Particulars regarding the different numbers, accessories, etc., can be obtained by any one mentioning this paper.

### New Lavender Salts Bottle.

Whitall, Tatum & Co., New York, Philadelphia and Boston, are introducing a lavender salts bottle of new design in dark



green glass; the stoppers are of glass and contains a recess on top for the reception of the druggist's name and address. Prices and discounts can be obtained on application to the firm at any of the addresses mentioned above.

Hiland Flowers, broker, whose advertisement appears in this issue, is a well-known druggist and chemist, thoroughly trustworthy as an agent. He is prepared to do a brokerage business or act as agent for manufacturers and dealers in this line with a New York connection.

### University of Texas School of Pharmacy.

The school of pharmacy which has been recently created by the Legislature of Texas opens its first session on October 2, 1893, at the University of Texas in Galveston.

It is the design of the faculty to make the instruction as practical as possible in every department of this school, and with this end in view they claim to have formulated a curriculum which embraces, in addition to didactic teaching, practical demonstrations in the laboratories.

Each student will be required to work four hours each week in the pharmaceutical laboratory, and the same number of hours each week in the chemical laboratory.

This school, including the laboratory instruction, will be thirty dollars for both terms (two years) and a fee of ten

dollars to cover cost of material each year in the laboratories. There will be no charge for examination or diploma.

Candidates for graduation must be twenty-one years of age and must have had two years' experience in a retail pharmacy and attended at least two full courses of instruction in this college, and must pass a satisfactory examination in all of the branches taught, and present a thesis on some original subject pertaining to pharmacy or one of the collateral branches of science. Anyone who has attended one full course of instruction in some other recognized school of pharmacy is eligible as a candidate for graduation, provided he shall have attended one full course of lectures in this college.

The candidate who complies with the requirements of this school, and passes a satisfactory examination in all branches, will receive the degree of Ph.G.

The faculty are composed of:

James Kennedy, M.D., Ph.G., professor of pharmacy; Ed. Randall, M.D., professor of materia medica, and S. M. Morris, M.D., B.Sc., professor of chemistry.

### National Wholesale Druggists' Association.

We are indebted to Alanson S. Brooks, chairman of the entertainment committee, for the following programme of the forthcoming meeting at Detroit:

Monday, October 9: First business session, 8 P.M.

Tuesday, October 10: Second business session, 10 A.M.; third business session, 2.30 P.M.; president's reception and promenade concert to be held at the Detroit Club, 8 to 10 o'clock P.M. A ride on the river will be extended to the ladies on Tuesday afternoon by a number of the owners of private yachts.

Wednesday, October 11: Fourth business session, 9.30 A. M.; complimentary excursion on the Detroit River, tendered by the Detroit drug trade and allied interests, for the afternoon and evening.

Thursday, October 12: Fifth business session, 10 A.M.; final business session, 2.30 P.M.; banquet at Hotel Cadillac, 7.30 P.M.; theater party given to ladies on the evening of the banquet to Detroit Opera House, where Mlle. Rhea will produce "The Queen of Sheba." An elaborate luncheon, with wines, etc., will be served on the steamer Promise, Wednesday afternoon, and Schremser's orchestra of 25 pieces will be in attendance.

Among others who have been secured for speakers at the banquet are Hon. Thos. W. Palmer, ex-senator and president of the Columbian World's Fair, and Don M. Dickinson, ex-postmaster general.

Robert J. Frick, of Louisville, widely known from his connection with the Interstate Retail Druggists' League, is to be congratulated on his engagement to Miss Lorraine E. Decker, of Evansville, Ky. The wedding will occur in Evansville, November 22.

Dr. Frank L. James' paper, the *National Druggist*, of St. Louis, will appear in a new and enlarged form with the November number. The subscription price of this excellent monthly is \$1, and remittances may be made payable to Dr. James at 615 Locust street, St. Louis.

**ILLINOIS BOARD OF PHARMACY.**—At the practical examination of the State Board of Pharmacy, Illinois, held in Chicago, September 12, 13, the following passed a satisfactory examination as licentiates in pharmacy and were registered as registered pharmacists by examination: W. W. Birchfield, C. Hedderich, T. A. T. Lemke, G. Martin, F. W. Roedel, H. G. G. Schmidt, J. Wohlgemuth, J. G. Wurster, I. R. Mower, of Chicago; C. W. Fenn, Prophetstown, and John Snodgrass, Bloomington. The following passed a satisfactory examination as assistant pharmacists and were registered as assistant pharmacists by examination: J. W. Evans, B. Johnston, T. Kaiser, J. C. Miller, E. McQuade, H. C. McWilliams, H. E. Stiefel, H. W. Town, O. Wintermeyer, of Chicago; F. G. Reed, Quincy; T. O. Musser, Freeport, and J. A. Burtis, Evanston. Fourteen failed to pass a satisfactory examination. The next meeting of the board of examination will be held Oct. 17, 1893, at No. 173 39th street, Chicago. For particulars address Frank Fleury, secretary, Springfield, Illinois.

## NOTES ON PRICES.

### Chemicals.

In the October circular of the Roessler & Hasslacher Chemical Co., of New York, a good deal of space is taken up with a description of the Chicago exhibit of their parent house, the Deutsche Gold U. Silber-Scheide Anstalt, vorm. Roessler, Frankfurt-on-the-Main.

Since the issue of the previous circular some few changes are noted, but business is referred to as being without special feature. Acetanilid is lower in price; carbonate of ammonia is higher in price and in good demand. Sodium peroxide is claimed to have found great attention, not only as an oxidizer for bleaching purposes but also as a powerful reducing and oxidizing agent in analytical work and for manufacturing purposes, its valuable properties in these indications being ascribed to its high percentage of available oxygen. Chromic acid is quoted higher.

## Review of the Wholesale Market.

NEW YORK, October 4, 1893.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

A very fair distributive trade is reported from the different firms of jobbing druggists, and the indications are favorable for a good consumptive movement during the new month. Though the aggregate amount of business transacted during the past month does not compare favorably with the corresponding period of last year the jobbing trade are on the whole disposed to regard the month's results as satisfactory. The fact that the volume of business transacted during the month under review was of better proportions than that of August is quoted as a reason for the tone of satisfaction with which the month's business is referred to by the trade. For the moment, speculative interest is somewhat checked, there being still a feeling of uneasiness due to the delay in legislative action by the Senate. Prices as a rule are steady and the market retains a firm tone.

### DRUGS.

**ALCOHOL**, grain, is steady at previous prices. Wood has been reduced by the combination of producers, the reduction being brought about, it is said, by the accumulation of raw material. Extra refined 95 per cent. is now quoted \$1. Special do. 97 per cent. \$1.05, and alcoholene, \$1.50, with the usual discount for quantities.

**ARNICA FLOWERS** have been in request and we note sales of 1,000 lbs. at 10 @ 11½c. as to quality.

**BALSAM FIR**, Canada, in barrels, continues held at \$3, while for single cans \$3.10 is asked, with occasional sales.

**BALSAM, PERU**, is a trifle unsettled, a few holders continuing to accept \$1.35 for goods of prime quality though the jobbing quotation remains \$1.50. Hamburg quality can be purchased at \$1.25.

**BUCHU LEAVES**, short, continue in good jobbing demand, with further sales of 2,000 lbs. at 12½c.

**BURGUNDY PITCH** continues in fair steady inquiry, recent transactions including sales of 100 stands at 2½c.

**CACAO BUTTER**, Dutch bulk, is well sustained at 33½ @ 34½c. with numerous large sales within this range.

**CAFFEINE** owing to active competition is still offered at \$1.90, though this is lower than the import cost.

**CANTHARIDES** continue very quiet, but the quotation of the market is unchanged at 70 @ 75c. for Russian and 20 @ 28c. for Chinese.

**CASSIA BUDS** are firm in view of strong foreign advices and holders are now asking 19c.

**CHIRETTA** is scarcer and firm at 20c. for the small available quantity.

**CHAMOMILE FLOWERS**, German, are neglected momentarily, there being little inquiry for the quality offering at 17 @ 18c., or for fancy, stock, etc., up to 22 @ 25c. is asked.

**COD LIVER OIL**, Norwegian, is passing out moderately into channels of consumption at the range of \$18.50 @ \$22.00 for ordinary to good grades.

**ERGOT** is not inquired for to any extent and there is seemingly no effort being put forth to urge the distribution at a concession.

**ELDER FLOWERS** are moderately active in a jobbing way, though the available quantity is small. The range is quoted at 9 @ 9½c.

**COLOCYNTH APPLES** are easier, but the demand is still limited. We quote Trieste at 27 @ 38c. and Spanish at 20 @ 24c. as to quality.

**DOGGRASS** is now offered at 5½c. with sales of 1,000 lbs. reported at this range.

**HENBANE LEAVES** have been inquired for and we note sales of 1,000 lbs. at 8½c.

**JABORANDI LEAVES** continue in light receipt and with no recent arrivals the small available stock is held at 60c.

**LYCOPodium** is well sustained at 52 @ 53c., though little or no inquiry is experienced.

**MORPHINE** is without quotable change, but the demand for forward delivery is referred to as fairly active at full makers' prices.

**OPIUM** has weakened slightly in the interval though the market is yet characterized by a firm feeling. The general asking price for single cases is \$2.65 though it

is thought by many in the trade it can be shaded upon a firm bid for quantity lots. In a jobbing way \$2.70 @ \$2.75 is yet asked with a moderate distribution reported at this range. Powdered is maintained steadily at \$3.35 @ \$3.45 as to test and holder. In their "Opium Market Report," issued under date of September 25, E. J. Lavino & Co., Philadelphia, estimate the present year's crop at something between 2,000 to 2,500 cases, and state that higher prices on this account can reasonably be anticipated, a sudden upward movement being among the probabilities as soon as importers turn to the primary markets to replenish their depleted stocks.

**QUININE** is developing a firmer tone and the demand continues moderately active, though there is yet no apparent disposition on the part of buyers to branch out into round quantities. Of foreign we note recent sales of some 15,000 ounces at the range of 18½ @ 18¾c. as to brand and package, but this would be difficult of duplication as the stock obtainable at this price has shrunk considerably, and with firmer London cables stock in second hands is generally held at 19 @ 19½c. regular.

**SUGAR OF MILK**, Swiss, has attracted some attention during the week and we are reported sales of 1,200 pounds at 23c. Domestic continues in good inquiry with current sales at the range of 11 @ 13c. as to brand and quantity.

**TONKA BEANS** are quiet but firm upon the basis of \$1.85 for Angostura.

**VANILLA BEANS** continue in good jobbing demand and firm at the range of \$6.50 @ \$11 as to quantity.

### DYESTUFFS.

**CUTCH** is showing a firmer tendency, some very large transactions having taken place during the past week. 4¼c. is yet acceptable for SM, though in most instances 4½c. is asked, while for small lots up to 5c. is wanted.

**DIVI DIVI** develops no movement of consequence, the distribution being about normal with \$55 @ \$65 representing the range.

**GAMBIER** is held steadily on spot at 4 @ 4¼c., though these figures can be shaded upon firm bids for quantity lots. The price to arrive and forward shipment remains 3¾ @ 4c.

**MADDER** continues to find moderate consuming outlet at the range of 10 @ 15c. for Dutch and 9 @ 9½c. for French as to quantity.

**NUTGALLS**, Blue Aleppo, are held and selling in a moderate way at 14 @ 14½c. as to quantity.

**SUMAC**, Sicily, are firmly held at \$70 @ \$75 as to brand and quantity.

### CHEMICALS.

**ARSENIC**, white, is not quotably higher, the range standing at 3¼ @ 3½c. with a moderate distribution at these figures.

**BLEACHING POWDER** continues in fair moderate inquiry upon the basis of 2½ @ 2¾c. for English and 2¼c. for German.

**BLUE VITRIOL** is steady and in moderate demand with sales at 3 @ 3¾c. as to quantity and brand.

**BORAX** is without new or interesting feature at the previous range.

**BROMINE** has been advanced 2c. per lb., the quotation now being 43 @ 47c.

**BRIMSTONE**, CRUDE, continues dull at nominally unchanged quotations.

**CARBOLIC ACID** continues in moderate jobbing inquiry at 13½ @ 14c. for bulk and 19 @ 20c. in pound bottles.

**CHLORATE OF POTASH** appears to be working into better position, most holders expecting 14½ @ 15c. for ordinary jobbing quantities.

**CITRIC ACID** in kegs can be purchased on the outside at 44c., though the usual quotation stands 45c. Manufacturers' quotations remain 45½ @ 46c. for bbls. and kegs.

**CREAM TARTAR** is slightly easier, though the demand continues light and unimportant. Manufacturers still quote 18½ @ 19c. for crystals and powdered respectively, though these figures can be shaded in instances from second hands.

**NITRATE OF SODA** continues held at \$1.80 @ \$1.85 for spot goods. For forward shipments \$1.90 is asked.

**OXALIC ACID** is fairly steady at the range of 6¼ @ 6½c., while in some instances an increase on these figures is required.

**SAL SODA**, English, is firmer with \$1.02½ @ \$1.05 now required. Domestic offers at 97½c. @ \$1.00 with the usual discount.

**SODIUM BICARBONATE**, Domestic, is quoted at 29c. @ 3c. as to quantity, and English 3¼ @ 3½c.

#### ESSENTIAL OILS.

**ANISE** is finding sale in a small way at \$1.37½ @ \$1.40.

**BERGAMOT** is without new or important features and continues held at \$1.80 @ \$2.75.

**CAJUPUT** is easier with sellers at 45 @ 55c.

**CASSIA** offers without reserve and is meeting with fair jobbing demand at 75 @ 80c.

**CLOVE** meets with steady fair inquiry with sales within the range of 55 @ 60c. for bud and 50 @ 52½c. for stems.

**LEMON** continues in fair reasonable demand at the former range of \$1.15 @ \$2.10.

**PEPPERMINT** is not taken with the usual freedom, though several large lots have been taken up for export during the week at \$2.42½. The market is regarded as a trifle unsettled owing to the receipt of conflicting statements from the growing districts. Bulk upon spot is quoted at \$2.20 @ \$2.40 for Western and Wayne Co., while HGH is held at \$2.55 @ \$2.60.

**ROSEMARY** is developing a firmer tone owing to stronger advices from primary sources; quoted 40 @ 70c.

**WINTERGREEN** is a trifle easier, being offered freely at \$1.55 @ \$1.60. Artificial has declined to 95c.

#### GUMS.

**ARABIC** is meeting with a steady inquiry from consumers and values are fairly well sustained at the previous range.

**ASAFETIDA** is in strong statistical position, prime grades of Calcutta bringing in instances up to 25c.

**CAMPHOR** can still be obtained from the hands of outside holders at 45 @ 46c. in barrels and cases respectively; manufacturers continue to quote barrels 46c. and cases 47c.

**CHICLE** remains dull and quiet at 24 @ 25c. with indications of an early decline.

**KINO** is held and jobbing fairly at the range of 75c. @ \$1. The available supply is not large.

**SENEGAL** remains quiet, the demand being limited to small and unimportant quantities.

**SHELLAC** is in reduced supply and held at full previous prices.

**TRAGACANTH**, Aleppo, is slightly easier, 54 @ 56c. new being named for first flake.

#### ROOTS.

**ALKANET** has been in fair inquiry, and included among recent transactions are sales of 1,500 lbs. at 15½c.

**COLCHICUM** comes lower from primary sources, the lay down cost being given at 8½c. This does not affect the quotations in this market, which remain 11 @ 14c.

**GINGER**, Jamaica, is firm, held steadily at the previous range.

**GOLDEN SEAL** develops no action of importance. We quote the range at 20 @ 21c.

**IPECAC** does not offer below \$1.20 @ \$1.25 with a limited distribution at this range.

**JALAP** of prime quality is maintained steadily at 28 @ 30c., with the current sales at this range.

**SARSAPARILLA**, Mexican, is easier though not openly offered below 9½c.; fair jobbing demand.

**SENEGA** continues quiet, though previous prices still rule, say 33 @ 35c. as to quality.

#### SEEDS.

**ANISE** is meeting with moderate jobbing attention at 6 @ 10½c. as to brand and quality.

**CANARY** is inactive though no quotable change in price is noted.

**CELERY** is meeting with a moderate inquiry at 7½c.

**CORIANDER** shows no change from 4 @ 4½c. for bleached and unbleached respectively.

**HEMP**, Russian, continues held at full 3c., and we hear of some jobbing sales at this figure.

**MUSTARD** remains dull and without quotable change.

**POPPY** continues to offer at 7c. though the trade requirements are light.

## Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted free of charge. Write distinctly, on one side of paper only, and do not use postal cards.*

### POSITIONS VACANT.

**WANTED AT ONCE**—Registered drug clerk, German preferred. Apply with references to The Hamilton Drug Stores, Auburn, N. Y.

### POSITIONS WANTED.

**PHARMACIST'S RELIEF**—For evening and Sunday relief work. J. Maxwell MacDonald, 339 Dean street, Brooklyn.

**YOUNG MAN**, 21 years of age, wishes permanent position with good reliable druggist; five years' practical experience, also good laboratory training; salary moderate. G. A. C., P. O. Box 136, Springfield, Mass.

**REGISTERED PHARMACIST**, six years' experience, age 22, married, wants situation in or near Salem; best of references. Fred Lane, 123 Wash. street, Gloucester, Mass.

**SITUATION WANTED** as traveling sales an for some first-class wholesale druggist or druggist sundries house; am not afraid to hustle; have no bad habits and willing to take any territory. Address "Hustler" at this office.

**DRUG CLERK**, 14 years' practical experience, desires steady situation; registered in Ohio, Illinois, New Jersey and Pennsylvania; 27 years old; single. Address "Edward," 584 Lake street, Cleveland, O.

**POSITION WANTED**.—By a young man 24 as manager or clerk in Pennsylvania; registered by examination; best of references; 5 years, experience; also familiar with book, stationery and paint trade; can stay in present position but desires change for reasons which will be given. Address H. C. C., Box 44, Troy, Penn.

**POSITION** as Prescription Clerk wanted; registered in Connecticut; highest references; age 24; salary \$18. At liberty end of October. Address "R. T. T." Box 1315, Meriden, Conn.

### BUSINESS OPPORTUNITIES.

**I WANT TO BUY** a drug store in city or country doing \$20,000 or \$30,000 a year; will give in exchange good improved real estate. Address "Hawkins," 33 Orchard street, Newark, N. J.

**OLD ESTABLISHED** drug store to rent, repainted and stocked; new "soda" apparatus (no cutting); Hudson River town; opening for a *live* man, on main street. "F. A. G.," 236 Liberty street, Newburgh, N. Y.

**WANTED**—To buy, half interest in good paying drug store in Texas. Address, at once, W. LaRine, Athens, Texas.

**SPLENDID OPPORTUNITY** to purchase a drug store in Ohio town of 500 inhabitants; the only drug store in 10 miles square; two boarding schools of national repute and a township of 5,000; will be sold for \$1,500; reason for sale, incapacity from old age. Address "A. B." at this office.

**FOR SALE**—A paying drug store in Northern Vermont; inventory, \$1,500; no opposition; no dead stock; living apartments over store; sales average \$10 per day. Write for full particulars to G. A. Beede, Iraaburgh, Vermont.

**FOR SALE**—Complete set of 200 shop bottles in fair condition; also one pair of Troemner's box prescription scales No. 12; will be sold cheap. Address Exley Bros., 41 Virginia street, Wheeling, W. Va.

**FOR SALE**—Nicely furnished drug store in Rochester, N. Y.; good location on one of the main thoroughfares; doing nice business; proper reasons for selling given. Address "Drug Store," at this office.

**FOR SALE**—In Baltimore, Md., drug store and dwelling, together or separate; an excellent opportunity for Hebrew; two synagogues in neighborhood; prominent corner; good Hebrew trade; it is worth looking into; good reasons given for retiring. Address "I. V. A.," care AMERICAN DRUGGIST, 37 College place, New York.

**I WANT TO BUY** a drug store, prefer Pennsylvania, with \$3,000 to \$6,000 stock; will pay *cash*; must do at least \$10,000; profit \$3,500 at least. Don't write without you have got the article. E. E. Hyer, Lock Box 18, Galeton, Pa.

**DRUG STORE**—Will sell half interest in a paying store or entire business; would prefer to sell only half interest or get some capitalist interested, as partner wishes to withdraw; store worth \$10,000 to \$15,000 in city of 100,000 inhabitants or more; particulars given to party wishing to buy. Address "W. B. B." at this office.

**FOR SALE** at a bargain, a little gem of a country drug store; clean stock; in center of wealthy farming country, 18 miles from Syracuse, N. Y.; an unusually good opening for a physician and druggist. Address J. Miles Cummings, Syracuse, N. Y.

**FOR SALE** at a bargain, if sold at once, an all year drug store in Asbury Park; fair stock and finest soda fountain in the place. Address Box 745, Asbury Park, N. J.

**Clerks and Employers should call at this office, register their wants and examine our list of POSITIONS WANTED POSITIONS VACANT and BUSINESS OPPORTUNITIES, which can be consulted free of charge.**

# ORIGINAL PACKAGE PRICES.

It should be understood that the prices quoted in this column are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a considerable range of prices.

| Drugs, Chemicals, &c.           |          |          | Codeine, eight..... 4.65      |         |         | Nux Vomica, lb..... .03 1/2  |          |         | Cardamom, Malabar,              |         |         |
|---------------------------------|----------|----------|-------------------------------|---------|---------|------------------------------|----------|---------|---------------------------------|---------|---------|
| Acetanilid, bulk, per lb.       | .35      | .36      | Cod Liver Oil, Nor-           | .80     | .80     | Nutgalla, China, per lb.     | .13      | .13 1/2 | per lb.                         | .75     | .85     |
| " lb., per lb.                  | .35      | .38      | wegian, bbls..... 18.50       |         |         | Aleppo, per lb..... .14      |          | .14 1/2 | Colchicum, lb..... .14          | .14     | .14     |
| " oz., per oz.                  | .06 1/2  | .06 1/2  | Colocynth..... .27            | .38     |         | Oils, Essential:             |          |         | Coriander, lb..... .11          | .11     | .04 1/2 |
| Acetate of lime:                |          |          | Trieste, lb..... .27          | .38     |         | Anise..... 1.35              | .40      |         | Cummin, lb..... .11             | .11     | .11     |
| Brown, per 100 lb.....          | .90      | .95      | Spanish..... .20              | .24     |         | Almond, Bitter..... 7.50     | .40      |         | Fennel, Germ, lb..... .11       | .11     | .11     |
| Gray, per lb..... .01 1/2       | .01 1/2  | .01 1/2  | Copperas, per 100 lb.....     | .80     | .90     | " Sweet..... .80             | .43      |         | Flax Meal, per lb..... .08      | .08     | .08     |
| Acids:                          |          |          | Cr. Tartar, Crystals, lb      | .18 1/2 | .19     | Bergamot..... 3.50           | 4.00     |         | Foenugreek, lb..... .08 1/2     | .08 1/2 | .08 1/2 |
| Acetic Com'l..... .01 1/2       | .02      |          | Powdered, lb..... .10         | .80     |         | Cajeput, Native..... .45     | .55      |         | Hemp, Russian, lb..... .08 1/2  | .08 1/2 | .08 1/2 |
| Aquaforis, 36 deg.....          | .03 1/2  | .03 1/2  | Cubeb Berries, XX, lb.....    | .20     | .28     | Campor..... .07              | .08      |         | Mustard, yel. Cal. lb.          | .05 1/2 | .05     |
| " 40..... .02 1/2               | .04 1/2  |          | Ordinary, lb..... .20         | .25     |         | Cassa..... .75               | .80      |         | Mustard, brown, Cal.            | .03 1/2 | .04 1/2 |
| Benzoic, German..... .47        | .54      |          | Cutch, bales, SM, lb.....     | .04 1/2 | .04 1/2 | Citronella, Native..... .24  | .28      |         | Poppy, per lb..... .07          | .07 1/2 | .07 1/2 |
| " English..... .09              | .09 1/2  |          | Cutch, boxes lb..... .11      | .12     |         | Clove..... .53 1/2           | .55      |         | Quince, German, lb..... .45     | .45     | .50     |
| Boracic, Whole..... .13 1/2     | .14      |          | Cuttle bone, Trieste, lb      | .11     | .12     | Copaiba..... .70             | .75      |         | Rape, German, lb..... .03 1/2   | .03 1/2 | .03 1/2 |
| " Powdered..... .13 1/2         | .14      |          | Jewelers' lb..... .35         | .35     |         | Croton..... .75              | .80      |         | Rape, English, lb..... .05 1/2  | .06     | .06     |
| Citric, American..... .45 1/2   | .46      |          | Dextrine..... .04 1/2         | .05     |         | Cube..... .25                | .25      |         | Soap, Castile, Mars,            |         |         |
| " English..... .45 1/2          | .46      |          | Divi Divi, per ton..... 45.00 | 55.00   |         | Erigeron, per lb..... 1.45   | 1.60     |         | mottled, pure, lb.....          | .06     | .06 1/2 |
| Carbolic Crystals.....          |          |          | in reeds, lb..... .45         | .50     |         | Geranium Chris..... 4.50     | 7.50     |         | White, lb..... .09 1/2          | .10     | .10     |
| bulk..... .13 1/2               | .17 1/2  |          | Epsom Salts, per 100 lb.      | 1.00    | 1.10    | Lavender..... 1.80           | 1.85     |         | Soda Ash, lb., 48% per          |         |         |
| lb. bottle..... .80             | .81      |          | Ergot.....                    |         |         | " Garden..... .40            | .90      |         | 100 lb..... 1.50                | 1.80    | 1.80    |
| Muriatic, 18 deg..... .09       | 1.37 1/2 |          | G'm'n and Russ'n, lb          | .38     | .40     | Lemon, as to brand..... 1.35 | 2.10     |         | Squills, white, lb..... .04 1/2 | .06     | .06     |
| Nitric, 36 degrees..... .03 1/2 | .04 1/2  |          | Spanish, lb..... .45          | .47 1/2 |         | Lemongrass..... .75          | .75      |         | Sugar Milk, powd., lb.....      | .11     | .14     |
| " 40..... .04                   | .04 1/2  |          | Ergotine, Domestic.....       | 4.00    |         | Musk, per lb..... 7.00       | 8.00     |         | Sugar Lead, white, lb.          | .11     | .12 1/2 |
| Oxalic, English..... .06 1/2    | .06 1/2  |          | German..... 4.00              |         |         | Myrrane..... .17             | .19 1/2  |         | " Lead, brown, lb.              | .05 1/2 | .06     |
| " German..... .06 1/2           | .06 1/2  |          | Flowers:                      |         |         | Neroli..... .28              | .29      |         | Sulphate Ammonia, per           |         |         |
| Picric..... .26                 | .26 1/2  |          | Arnica Flowers, per lb        | .10 1/2 | .11 1/2 | Nutmeg..... 1.75             | 2.75     |         | 100 lb..... 2.90                | 3.00    | 3.00    |
| Salicylic..... 1.00             | 1.28     |          | Chamomile.....                |         |         | Orange..... 1.90             | 1.65     |         | Do. Potash, 48% per             |         |         |
| Sulphuric..... .80              | 1.00     |          | German, New, lb.....          | .18     | .25     | Origanum..... .24            | .25      |         | lb..... 1.11 1/2                | 1.15    | 1.15    |
| Tartaric, Crystals.....         | .23      | .23      | Roman, New..... .24           | .26     |         | Pennyroyal..... 1.20         | 1.25     |         | Do., Potash, 90% per            |         |         |
| " Powdered..... .23             | .24      |          | Roman, lb., old.....          | .12     | .20     | Peppermint, bulk.....        | 2.20     | 2.40    | lb..... 2.20                    | 2.25    | 2.25    |
| Tannic..... 1.05                | 1.20     |          | Lavender Flowers              |         |         | " GHG..... 2.50              | 2.65     |         | Sulphur, Roll.....              | .01 1/2 | .01 1/2 |
| Alcohol, Grain, per gal.        | 2.18     | 2.22     | Ordinary, per lb.....         | .04     | .08     | Rose..... 7.50               | 8.00     |         | " Flour.....                    | .01 1/2 | .01 1/2 |
| (Less rebate).....              |          |          | Select, per lb.....           | .15     | .65     | Sandalwood.....              | .85      | .85     | Spirits Nitre, U. S. P.....     | .39     | .40     |
| Wood, 95%..... 1.00             | 1.05     |          | Gambier, lb.....              | .04     | .04 1/2 | Sassafras..... .35           | .38      |         | Spirit Ammonia, Arom.....       | .44     | .45     |
| Alcoholine.....                 | 1.50     |          | Glycerin, bbls, lb.....       | .13 1/2 | .14     | Sassafras, Artificial.....   | .28      | .30     | Sulphuric Ether.....            | .54     | .61     |
| Alum, Lump, per 100 lb.         | 1.75     |          | " cases, lb.....              | .14     | .16     | Spearment..... 1.60          | 1.90     |         | Sumac, Sicily, ton..... 72.50   | 77.00   | 77.00   |
| Ground, per 100 lb.....         | 1.85     | 1.85     | Grains, Paradise, lb.....     | .07     | .07 1/2 | Tansy..... 2.00              | 3.00     |         | " Virginia..... 43.00           | 47.50   | 47.50   |
| Antifebrine per oz.....         | .19      | .20      | Guarana, lb..... 1.05         | 1.10    |         | Wintergreen..... 1.55 1/2    | 1.60     |         | Tar Barbadoes, gal.....         | .45     | .45     |
| Antipyrine, per oz.....         | 1.20     | 1.40     | Gums:                         |         |         | " Artificial..... .95        | .95      |         | Tin Crystals, bbls, per         |         |         |
| Arrow root, Berm., lb.          | .24      | .25      | Aloes, Barb, lb.....          | .06     | .12     | Wormwood..... 2.25           | 2.25     |         | lb..... .15                     | .15     | .15     |
| St. Vincent in bbl., lb.        | .11      | .11      | " Cape, lb.....               | .05 1/2 | .08     | " GHG.....                   | 3.75     |         | Jars, per lb.....               | .17     | .17     |
| Araric:                         |          |          | " Curacao, lb.....            | .08     | .03     | Opium, Natur'l, cas, per     | 2.65     | 2.70    | Tonka Beans, Angost.....        | 1.75    | 2.00    |
| Red Saxon, lb..... .05 1/2      | .06 1/2  |          | " Socotrine, lb.....          | .28     | .40     | lb.....                      |          |         | lb..... .55                     | .65     | .65     |
| White..... .05 1/2              | .06 1/2  |          | Arabic 1st picked.....        | .50     | .55     | Opium, Ordinary.....         | 2.70     | 2.75    | Tonka Beans, Para, lb.....      | .55     | .65     |
| Balsam, Copaiba, lb.....        | .30      | .35      | " and..... .36                | .40     |         | Jobbing, per lb.....         | 3.35     | 3.40    | " Surinam.....                  | .75     | .75     |
| Fir, Canada, gal..... 3.00      | .80      |          | Arabic, sorts..... 1.25 1/2   | .13     |         | Opium, Powd., per lb.....    | 3.35     | 3.40    | Turpentine, Spirits.....        | .31     | .32     |
| Fir, Oregon, gal..... .75       | .80      |          | Asafetida, lb..... .10        | .20     |         | Phenacetine, per oz.....     | .85      | .90     | Vanilla Beans, lb..... 6.00     | 11.00   | 11.00   |
| Peru, lb..... 1.35              | 1.40     |          | Benzoic, lb..... .20          | .38     |         | Prussiate Potash, Yel-       |          |         | low, per lb..... .21 1/2        | .22     | .22     |
| Tolu, lb..... .23               | .25      |          | Chicle, lb..... .24           | .25     |         | low, per lb..... .39         | .42      |         | Red, per lb..... .39            | .42     | .42     |
| Bark, Buckthorn, per lb.        | .10      | .10      | Gamboge, lb..... .55          | .60     |         | Quicklyer, flasks, per       |          |         | lb..... .58                     | .54     | .54     |
| Cascara Sagrada, lb.....        | .07      | .08      | Guaiac, lb..... .17           | .25     |         | lb.....                      |          |         | Quinine:                        |         |         |
| Elm, lb..... .10                | .12      |          | Kino, lb..... .75             | 1.00    |         | Domestic, bulk, oz.....      | .20      | .23     | Domestic, City, raw, gal.       | .37     | .37     |
| Orange peel..... .06            | .07      |          | Mastic, lb..... .75           | 1.00    |         | Domestic, oz.....            | .28      | .29     | Linseed, City, boiled,          |         | .50     |
| Sassafras, per lb..... .08      | .08 1/2  |          | Myrrh, lb..... .20            | .38     |         | German, bulk.....            | .19      | .19 1/2 | gal.....                        | .40     | .40     |
| Soap, lb..... .03 1/2           | .04      |          | Oilbanum, sorts, lb.....      | .05 1/2 | .06 1/2 | German, oz.....              | .27 1/2  | .29     | Linseed, Western, raw,          |         | .40     |
| Bicarb. Soda, Engl., lb.        | .03 1/2  | .03 1/2  | " tears, lb..... .11          | .13     |         | Roots, Aconite, lb.....      | .09      | .14     | gal.....                        | .40     | .40     |
| domestic, lb..... 2.90          | 3.00     |          | Sandrac, lb..... .20          | .30     |         | Althea, cut, lb..... .15     | .18      |         | Lard, City, Ex. Winter,         |         | .65     |
| Bismuth, Sub. Nit.,             | .10 1/2  | .11      | Senegal, picked, lb.....      | .14     | .60     | Alkanet, lb..... .06         | .07      |         | gal.....                        | .64     | .65     |
| per lb., bulk..... 1.95         | 2.00     |          | sorts, lb..... .09 1/2        | .10     |         | Arnica, lb..... .12          | .13      |         | Lard, City, Prime, pres-        |         | .65     |
| Bismuth, Sub. Carb.,            |          |          | Shellac, DC, lb.....          | .30     | .37     | Beladonna Ger., lb.....      | .08      | .12     | ent make, gal.....              | .64     | .65     |
| per lb., bulk..... 2.25         | 2.30     |          | " VSO, lb.....                | .30     | .37     | Blood, lb..... .05           | .06      |         | Lard, City, Extra No.           |         | .65     |
| Bleach'g Powd., per lb.         | .04 1/2  | .03      | " Diam'd I, lb.....           | .20     | .29     | Calamus, lb..... .07         | .08      |         | 1, gal.....                     | .55     | .65     |
| Blue Vitriol, lb..... .03 1/2   | .03 1/2  |          | " SS, lb..... .28 1/2         | .29     |         | Calamus, bleac'd, lb.        | .21      | .24     | Lard, City, No. 1, gal.....     | .50     | .55     |
| Borax, refined, lb..... .08     | .08 1/2  |          | " TN, lb..... .26             | .26     |         | Colchicum, per lb.....       | .11      | .14     | " West, prime, gal.....         | .75 1/2 | .73     |
| Concentrated, lb..... .07 1/2   | .08      |          | " Garnet..... .24             | .24     |         | Colombo, lb..... .06 1/2     | .11      |         | Cotton-seed, C r u d e,         |         | .33     |
| Brimstone, best ad, ton         | 19.00    | 19.50    | " Bleached, lb.....           | .26     | .27     | Colombo, lb..... .06 1/2     | .11      |         | grades, gal.....                | .31     | .33     |
| Bromide Potash, Do-             |          |          | Tragacanth, Aleppo, lb.       | .30     | .38     | Dandelion, Germ, lb.....     | .07 1/2  | .08     | Yellow, prime, gal.....         | .38     | .39     |
| mestic, b'l, lb..... .35        | .36      |          | Harlem Oil..... .20           | 2.50    |         | Dogwood, lb..... .08         | .10      |         | Cotton-seed, Summer             |         | .37     |
| bottles, lb..... .39            | .40      |          | Indigo, lb..... .45           | 2.00    |         | Galangal, lb..... .04 1/2    | .04 1/2  |         | Yellow, off grades.....         | .36     | .37     |
| Bromide Ammonium,               |          |          | Insect Flowers..... .18       | .20     |         | Gentian, lb..... .03 1/2     | .04      |         | Cotton-seed, Winter             |         | .44     |
| bulk..... .43                   | .44      |          | Insect Powder, pure, lb.      | .16     | .22     | Ginseng, lb..... 2.25        | 3.00     |         | White, gal.....                 | .46     | .46     |
| Bromide Sodium, b'l.....        | .40      | .41      | Iodide Potash, bulk, lb.      | 2.70    | 2.75    | Ginger, Jamaica, bld., lb.   | .16 1/2  | .17 1/2 | Sperm, Crude, gal.....          | .70     | .70     |
| Bromine, bulk..... .43          | .47      |          | Japan, lb..... .23            | .28     |         | unbld., lb..... .15          | .17      |         | Sperm, Natural Spring           |         | .77     |
| Burgundy pitch, per lb.         | .02 1/2  | .08 1/2  | Isinglass, Am'r'n, lb.....    | .47 1/2 | .60     | Ginger, Jamaica,             |          |         | gal.....                        | .75     | .77     |
| Cacao Butter:                   |          |          | Japan, lb..... .35            | .60     |         | unbld., lb..... .15          | .17      |         | Sperm, Bleached Spring          |         | .82     |
| 12 lb. boxes, lb.....           | .30      | .31 1/2  | Juniper Berries, lb.....      | .01 1/2 | .06 1/2 | Golden Seal, lb.....         | .20      | .21     | gal.....                        | .85     | .87     |
| Dutch A., per lb.....           | .32 1/2  | .34      | Leaves:                       |         |         | Hellebore, powd., lb.....    | .07 1/2  | .08     | Whale, Crude, gal.....          | .86     | .88     |
| Caffeine..... 1.90              | .25      |          | Belladonna, per lb.....       | .10 1/2 | .12     | Ipecac, lb..... 1.20         | 1.25     |         | Whale, Natural Win-             |         | .48     |
| Campor, red'd, bbls, lb         | .48 1/2  | .49      | Buchu, short, lb.....         | .15     | .15     | Jalap, lb..... .27           | .28      |         | ter, gal.....                   | .47     | .48     |
| cases, lb..... .51              | .51      |          | " long, lb..... .28           | .30     |         | Kava Kava, lb..... .30       | .30      |         | Whale, Bleached Win-            |         | .51     |
| Cantharides, Chinese, lb.       | .28      | .30      | Coca, prime, lb..... .12      | .30     |         | Licorice, select, lb.....    | .08      | .12     | ter, gal.....                   | .50     | .51     |
| Russian, lb..... .70            | .75      |          | Damiana, lb..... .27          | .30     |         | " P c w'd, lb.....           | .05      | .12     | Whale, Ex. Bl'ch'd, gal.        | .52     | .53     |
| Carb. Ammonia.....              |          |          | Hyocyamus..... .07            | .08 1/2 |         | Lovage, lb..... .50          | .55      |         | Menhaden, Crude,                |         | .33     |
| cases, lb..... .08 1/2          | .09      |          | Jaborandi, lb..... .14        | .16     |         | Mandrake, lb..... .03 1/2    | .04      |         | Sound, gal.....                 | .33     | .33     |
| Cassa Buda, lb..... 1.85        | .15      |          | Senna Alex garbled, lb.       | .22     | .27     | Orria, Florentine, lb.....   | .25      | .35     | Dark, pressed, gal.....         | .36     | .36     |
| Castor Oil, cases, lb.....      | .15      | .15 1/2  | Senna Tinney, lb.....         | .07     | .20     | Orria, Verona..... .12       | .14      |         | Light, pressed, gal.....        | .38     | .38     |
| Barrels, lb..... .14 1/2        | .15      |          | Stramonium..... .05 1/2       | .08     |         | Pink, lb..... .22            | .25      |         | Bleached, Winter, gal.....      | .44     | .44     |
| Caustic Soda, 70%, 100 lb.      | 2.70     | 2.85 1/2 | Licorice, P. & S., lb.....    | .24     | .24     | Rhubarb, whole, lb.....      | .70      | .80     | Extra Bleached, gal.....        | .44     | .44     |
| Caustic Soda, 60%, 100 lb.      | 2.90     | 3.10     | Lupulin, German..... .70      | 1.75    |         | Sarsaparilla, Hond, lb.      | .28      | .45 1/2 | Tallow, City, prime gal.        | .50     | .55     |
| Chalk, Engl. Precip.,           |          |          | Lycopodium, lb..... .58       | .55     |         | Sarsaparilla, Mex, lb.       | .09 1/2  | .10     | Western, prime, gal.....        | .50     | .55     |
| bulk, lb..... .04               | .06      |          | Manna, large flake, lb.....   | .15     | .15     | Senega, lb..... .33          | .35      |         | Cocunut, Ceylon, lb.....        | .05 1/2 | .05 1/2 |
| Chloral Hydrate Cryst-          |          |          | Small flake, lb..... .48      | .45     |         | Serpentaria, lb..... .20     | .22      |         | Cochin, lb..... .05 1/2         | .06 1/2 | .06 1/2 |
| als, bulk, per lb.....          | .95      | 1.05     | Menthol, Japanese.....        | 3.90    | 4.00    | Valerian, Belgian, lb.....   | .07      | .07 1/2 | Cod, Domestic, gal.....         | .38     | .40     |
| Hydrate crusts, bulk,           |          |          | Blue Pill, lb..... .34        | .34     |         | " German, lb..... .10        | .12      |         | Foreign, gal.....               | .42     | .45     |
| per lb..... .09 1/2             | 1.00     |          | Calomel, lb..... .71          | .71     |         | Saffron, Amn., lb.....       | .28      | .30     | Red Elaine, gal.....            | .44     | .45 1/2 |
| Chlorate Pot. Crys., lb.        | .14 1/2  | .15 1/2  | Cor. Sublimite, lb.....       | .62     | .62     | Spanish, Valencia, lb.       | 6.50     | 7.00    | Red Saponified, lb.....         | .05 1/2 | .05 1/2 |
| Pow'd, lb..... .15 1/2          | .15 1/2  |          | Mercury and Chalk.....        | .30     | .30     | Spanish, Alicante, lb.       | 5.00     | 5.50    | Bank, gal..... .40              | .41     | .41     |
| Chloroform, Bulk, lb.....       | .50      | .51      | Ointment, lb..... .30         | .39     |         | Sal Ammoniac, lump, lb.      | .08 1/2  | .09     | Straits, gal..... .41           | .41     | .41     |
| Cinchonidine, Sulphate          |          |          | Red Precipitate, lb.....      | .31     | .31     | Do., Granulated, lb.....     | .05 1/2  | .09     | Olive oil for table in tins     | .50     | 1.50    |
| of German, oz..... .02          | .02 1/2  |          | White..... .86                | .86     |         | Sal Soda, Eng., 100 lb.      | 1.02 1/2 | 1.05    | Olive, Com'n, bbls, gal.        | .58     | .60     |
| Citrates, U. S. P. Iron, lb.    | .50      | .50      | Morphine, bulk, oz.....       | 1.00    | 2.05    | Sal Soda, American.....      | .90      | .95     | Neatsfoot, prime, gal.....      | .65     | .65     |
| Soluble..... .55                | .55      |          | Eights, oz..... .25           | 2.30    |         | Salt peter, crude, per lb.   | .04 1/2  | .05     | Palm, prime, Large, lb.         | .05 1/2 | .06     |
| Iron and quinine.....           | 1.50     | 1.55     | Moss, Irish, lb..... .06      | .06 1/2 |         | Salt peter, Refined, per     | .06      | .08     |                                 |         |         |
| Iron and strychnine.....        | 2.00     | 2.05     | Irish, bleached, lb.....      | .13     | .15     | Seeds, Anise, Ital., lb.     | .09      | .10 1/2 |                                 |         |         |
| Phosphate, U. S. P. lb.         | .57      | .57      | Muriate Potash, per 100       |         |         | Anise, German, lb.....       | .06      | .06 1/2 |                                 |         |         |
| Pyrophos, U. S. P., lb.         | .55      | .55      | lb..... 1.78                  | 1.85    |         | Anise, Star, lb..... .22     | .23      |         |                                 |         |         |
| Pyrophos, Soluble, lb.          | .55      | .55      | Naphthaline, flake, per       |         |         | Canary, Smyrna, lb.....      | .33 1/2  | .03 1/2 |                                 |         |         |
| Potash, per lb..... .49         | .49      |          | lb..... .03 1/2               | .05     |         | Canary, Sicily, lb.....      | .00 1/2  | .04     |                                 |         |         |
| Soda, per lb..... .49           | .49      |          | Naphthaline, Ball, per        |         |         | Canaway, lb..... .07         | .07 1/2  |         |                                 |         |         |
| Cobalt, pow'd, lb..... .10      | .12      |          | lb..... .05                   | .05     |         | Cardamom, Aleppy,            |          |         |                                 |         |         |
| Cocaine Muriate, per oz.        | 5.15     | 6.20     | Nitrate Silver, oz.....       | .48     | .49 1/2 | per lb..... .65              | .75      |         |                                 |         |         |

# American Druggist and Pharmaceutical Record.

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## GERM-NUCLEIN.

RECENT investigations of Dr. VICTOR C. VAUGHAN, of the University of Michigan, into the principles of immunity and cure in the infectious diseases, as illustrated in his presidential address to the Section on General Medicine of the Pan-American Medical Congress, mark so remarkable a step in the progress of modern bacteriology as to compel most willing admiration for the man and his work. The artificial production of immunity from disease dates back to 1796 when Jenner first made known his discovery with reference to the prevention of smallpox by inoculations of a mild form of the infection. Since then the subject of immunity against disease has received most careful consideration from many of the most brilliant thinkers in the scientific world, until it is now regarded as a special subject of scientific study; while at the same time finding place in the schools of medicine as one of the special branches of study in that science. PASTEUR, the eminent French chemist, has particularly distinguished himself in this field, and his labors have won for him with other honors that of election to membership in the French Academy. His success in the treatment of rabies by inoculating the patient with sterilized cultures of the pathogenic germ, has made his name known in all parts of the civilized world, though scientists are not yet prepared to admit that the treatment is either entirely curative or preventative. With regard to PASTEUR's success in the preven-

tion of chicken cholera and anthrax by the introduction into the tissues of modified forms of the specific germs of these diseases, it should be known that his teachings on the subject are accepted as authoritative in all schools of bacteriology.

Immunity against disease may be either artificial or acquired; and the induction of artificial immunity, according to VAUGHAN, may be brought about either by an attack of the disease ending in recovery; by direct inoculation with the germs of disease, according to certain recognized methods providing for either (1) vaccination with a modified or less virulent form of the infection; or (2) the introduction of at first a very small number of the virulent germs and successive inoculations with larger numbers; or by one or more treatments with sterilized cultures of the germs.

In studying the production of immunity from infectious diseases by the method of treatment with sterilized cultures, the question naturally presented itself to Dr. VAUGHAN as to what constituent of the culture conferred immunity, and it is from the study of this question that he has built up his theory regarding the rôle of the germ-nuclein. He has gone over the ground traversed by a number of German investigators, and, to quote his own words, he is "ready to believe that the immunizing substance is a constituent of the bacterial cell itself;" and is, besides, a poison which is capable of acting as an antidote to the greater poison of infection when administered in small doses with the latter purpose in view.

Dr. VAUGHAN has not limited his investigations to this either, but has proceeded further and succeeded after much experimentation in isolating active nucleins from various cellular bodies. The preparation, chemical reaction, germicidal properties and physiologic effect of these nucleins are described in detail in his address to the Pan-American Medical Congress which is printed in part in the October 7 number of that excellent medical journal, the *Philadelphia Medical News*.

The new field of study opened up by Dr. VAUGHAN will doubtless be fruitful of research not less in the domain of chemistry than of medicine, though practical applications of the study in its bacteriological aspect may not ensue for some years to come. Many persons who read for the first time of Dr. VAUGHAN's researches into the germicidal properties of the nucleins obtained from glandular organs like the testicles, thymus and thyroid will find a corroboration of the claims made in very recent times as to the therapeutic value of certain organic extracts, but further study will convince all such that the germ nuclein theory is founded upon a more scientific basis and bears no more relation to the former than does the medication of the present day with that of ancient times.

## PHARMACEUTICAL NOTES.

**Tests for Balsam Peru.**—According to Dr. Wimmel (*Apoth. Zeit.*, 1893, 443,) pure balsam Peru has a specific gravity never below 1.138 nor above 1.150, and should respond to the ammonia test, and that its benzine extract should respond to the nitric acid reaction. This, of course, in addition to standing an examination as to color, taste, odor, etc.

A heavy, dull headache over the brow and accompanied by languor, chilliness and a feeling of general discomfort with distaste for food, can generally be completely removed by a two grain dose of potassium iodide dissolved in half a wine glass of water and this quietly sipped, the whole quantity being taken in about ten minutes.—*Alienist and Neurologist.*

## Dental Anæsthetics.

The following tabulated results by Prof. S. P. Sadtler, show the constitution of a number of proprietary secret local anæsthetics and bring out the rather astonishing, or, at least, the amusing fact that those which are claimed to be superior to cocaine contain, the majority of them, that very substance :

|                                    | Non-Volatile Matter. | Anhydrous Cocaine Hydrochloride rate from Chlorine Determinations. | Alkaloid extracted by Chloroform. | Other Constituents.  |
|------------------------------------|----------------------|--|-----------------------------------|--|
| 1. Dickson's Improved.....         | 4.06                 | 3.90   | 3.27                              | Carbolic acid, choral hydrate.   |
| 2. Arophene.....                   | 12.98                | 1.46   | 1.05                              | Carbolic acid, choral, glycerin, oil of rose and probably alcohol.                       |
| 3. Jessop's.....                   | Liquid.              | 2.63   | 1.22                              | Carbolic acid, oil of rose.  |
| 4. Dorsenia.....                   | 3.82<br>0.30         | 0.20   | 0.145                             | Carbolic acid, camphor, and probably alcohol.  |
| 5. Weinmann's.....                 | 5.46                 | 5.68   | 3.72                              | Alcohol, oil of peppermint, brown color, and iodine (indicating aristol possibly).       |
| 6. Odontunder.....                 | 10.14                | 1.35   | 1.10                              | Carbolic acid, glycerin, oil of rose, and probably alcohol.                              |
| 7. Dental Surprise..               | Liquid.              | 1.46   | 1.16                              | Carbolic acid.   |
| 8. Barr's.....                     | 1.37<br>0.06         | None.  | None.                             | Alcohol solution of oils of peppermint and cloves.                                       |
| 9. Eureka.....                     | 3.36                 | 1.26   | 1.37                              | Carbolic acid and oil of rose.   |
| 10. Anæsthetic Ob-<br>tundent..... | Liquid.              | 3.39   | 2.61                              | Carbolic acid, camphor, glycerin, oils of cinnamon and citronella, and probably alcohol. |

**Cascarine.**—According to the studies of Leprince (*Bull. Génér. de Thérapeutique*, March 15, 1893), cascarine, the active principle of *Cascara sagrada* or *Rhamnus purshiana*, occurs in prismatic needles of a variable orange-yellow coloration. Some samples of cascarine are entirely red, without a trace of yellow. The coloration depends upon the degree of hydration, and probably also upon that of etherification. Cascarine is an insipid, odorless substance, soluble in caustic potash, soda, or ammonia, and gives with potash a reddish solution; it is likewise soluble in alcohol, with which it gives a yellow hue; also in chloroform, slightly so in ether, but is insoluble in water. The formula of the drug is given as  $C_{11}H_{10}O_6$ . Cascarine melts, decomposing at 200° C., and is entirely decomposed at 300° C., leaving a carbonaceous residue. The hydrated cascarine, with a composition of  $C_{11}H_{12}O_6 \cdot H_2O$ , occurs in the form of a greenish-yellow powder, having a melting-point of 200° C., and possessing, in other respects,

the same properties as the anhydrous substance. Exposed to the air, however, the hydrated cascarine absorbs moisture, and is turned into a brownish mass, which melts at 150° C., and presents the same characters as the alkaline extract of the crude cascara. Cascarine combines with *diacetic ether*, and is then represented by the formula  $C_{11}H_{10}O_6 \cdot (C_2H_5O_2)$ ; this latter appears in the form of yellow needles, insoluble in water and ether, soluble in alcohol, but less so than cascarine itself. When a rapid current of ammoniacal gas is passed through an alcoholic solution of cascarine to a point of saturation, crystals are formed. These crystals, dried and exposed to the air, lose the ammoniacal gas; placed then in a bottle, they slowly decompose into a black mass. This ammoniacal combination is represented by the formula  $C_{11}H_{10}O_6 \cdot (NH_3)_2$ .—*Therap. Gazette.*

## Extraction of Oils.

**Linseed Oil.**—After a résumé of the methods of manufacture and processes of purification of linseed oil the authors give the following data :

Specific gravity at 15° C. .... 0.9342  
 Fatty acids { Point of fusion .... 20°–21° C.  
                   " solidification 16°–17° C.  
 Temperature rise ..... 122°–126° C.  
 Iodine number ..... 158.7–159.78  
                   " of fatty acids .... 159.85  
 \*Saponification number ..... 190.2–192.7

Heydenreich's reagent produces an orange coloration with brown striæ, and those of Hauchecorne and Brullé a reddish brown, the oil remaining liquid.

Linseed oil is frequently adulterated with siccative and non-siccative oils, as also with mineral and animal oils and resins.

Colza and cottonseed oil can be recognized by the lowering of the iodine number and the temperature rise; the latter oil also gives a black coloration with silver nitrate. It is, however, much more difficult, if not impossible to detect the presence of other siccative oils such as those of poppy and hemp. Animal oils can be detected by their odor, as also by the addition of a mixture of nitric and sulphuric acids, which give an intense red coloration with fish oil. The adulteration with mineral oils and resins can be readily discovered by the process of saponification, when these substances rise to the surface.

In conclusion, the authors give an historical account of the investigations of other writers and discuss the results obtained.

**Oil of Pine.**—The seeds of various species of conifers contain a fatty oil which is used in commerce, though not found in any large quantity. Then the seeds of *Pinus sylvestris* contain 25–30 per cent. of a brownish yellow oil, possessing to a slight degree the odor and taste of turpentine; it is used in the manufacture of varnishes and as a combustible. The oil is very sparingly soluble, even in boiling alcohol; it dries very slowly. The following data are given :

Specific gravity at 15° C. .... 0.9215  
 Point of solidification ..... –18° C.  
 Fatty acids { Point of fusion .... 17°–19° C.  
                   " solidification 10°–16° C.  
 Iodine number ..... 118.9–120.06  
                   " of fatty acids ..... 121.5  
 Saponification number ..... 191.27

The oil gives an orange red coloration with Heydenreich and Brullé's reagents, and a rose with Hauchecorne's reagent.

\*By the "saponification number" is meant the number of milligrams of KHO required to saponify 1 grm. of oil.

**Oil of Grape Seed.**—In order to extract this oil, grape seeds are air-dried, crushed and pulverized, and then subjected to pressure; its production is practiced in some parts of Germany, France, and also Italy; the yield varies from 10 to 20 per cent., according to the quality of the grape, method of culture, climate, and other conditions. The oil is of a bright yellow color, turning brown after some time; on exposure it slowly becomes rancid; it is readily soluble in its own volume of glacial acetic acid at 70°, moderately soluble in alcohol.

Horn (Staz. agrarie 22, 217) has recently shown that this oil resembles castor oil, and may probably be substituted for it in the making of Turkey red oils. The following data are given:

|                            |                               |
|----------------------------|-------------------------------|
| Specific gravity at 15° C. | .....0.936                    |
| Point of solidification    | .....—10° C. to—12° C.        |
| Fatty acids {              | Point of fusion....23°—25° C. |
|                            | " solidification...18°—20° C. |
| Temperature rise           | .....52° C.                   |
| Iodine number              | .....65.8                     |
| " " of fatty acids         | ....98.9                      |
| Saponification number      | .....178.5                    |

The oil gives an intense orange coloration with Brullé's and Hauchecorne's reagents, and a reddish yellow with that of Heydenreich.

The saponification number resembles that of the oils from *Crucifera* in being very low. The oil in question also resembles these oils in containing the glyceride of erucic acid.

**Butter of Cacao.**—The butter of the cacao (*Theobroma cacao*) is now generally obtained as a by-product in the manufacture of chocolate. It is of a yellowish white color, unctuous to the touch, soluble in ether, benzene and acetic acid; it consists of the glycerides of stearic, oleic, palmitic, and arachidic acids. The following data are given:

|                       |                               |
|-----------------------|-------------------------------|
| Point of fusion       | .....28°—30° C.               |
| " solidification      | .....21.5°—23° C.             |
| Fatty acids {         | Point of fusion....48°—50° C. |
|                       | " solidification...45°—47° C. |
| Iodine number         | .....36—62                    |
| " " of fatty acids    | .....39—1                     |
| Saponification number | .....193.55                   |

Cacao butter is frequently adulterated with animal fat, stearic acid, soap wax, paraffin, and oil of almonds. The presence of paraffin can readily be ascertained by saponifying with alcoholic potash, and then warming with acetic anhydride, when the paraffin rises to the surface and solidifies on cooling.

Stearic acid can be estimated by the ordinary process of alkalimetry, using phenolphthalein as an indicator, the slight acidity of the butter not introducing any serious error. The presence of soaps and animal fats can best be recognized by the methods proposed by Björkland and Hager, the latter of whom has also devised a convenient process for the separation of the butters of the cacao and cocoa nut by the greater solubility of the latter in various solvents, such as amyl alcohol and petroleum.

**Oil of Maize.**—In the manufacture of alcohol from maize the seeds are first subjected to saccharification, the germs removed, and the oil extracted from them by pressure; a further quantity is also extracted from the vinasses. Thus obtained the oil is of a golden yellow color, without taste or odor; it is composed of olein, palmitin, and stearin, besides a small quantity of an ethereal oil. It has been recommended by Heinitsh as a substitute for olive oil in the preparation of ammoniacal and lead liniments and of ointments. The following data are given:

|                            |                                |
|----------------------------|--------------------------------|
| Specific gravity at 15° C. | .....0.9218                    |
| Fatty acids {              | Point of fusion.....18°—20° C. |
|                            | " solidification...13°—16° C.  |
| Temperature rise           | .....84° C.                    |
| Iodine number              | .....112.1                     |
| Saponification             | .....190.1                     |

The oil gives an orange coloration with Heydenreich's and Brullé's reagents and a red with Hauchecorne's reagent.

**Oil of Poppy Seed.**—Poppy seeds contain from 50–60 per cent. of oil, 30–40 per cent. being extracted in the first operation of pressure (*huile blanche*) and 22–25 per cent. in the second (*huile rouge*). The former is used as an article of food, especially in the north of France and some districts of Germany.

The following data are given, which are practically identical with those of former observers:

|                                |                    |
|--------------------------------|--------------------|
| Specific gravity at 15° C.     | .....0.927         |
| Point of fusion of fatty acids | ...20°—21° C.      |
| Temperature rise               | .....87°—88.5° C.  |
| Iodine number                  | .....136.82—137.55 |
| " " of fatty acids             | ....139            |
| Saponification number          | .....193.4—193.8   |

The oil gives an orange color with Brullé's reagent, a reddish brown with that of Heydenreich, and a dirty yellow with that of Hauchecorne.

The authors criticise the various methods which have been proposed to detect the sophistication of olive oil with poppy seed oil, which is frequently practiced in France; they conclude, however, that the method and reactions proposed are far from being specially characteristic of the poppy as distinguished from other siccative and seed oils in general.

**Butter of Cocoa Nut.**—Cocoa nutbutter is put upon the market either under its own name or as *vegetaline* and *lactine*; it is used for the adulteration of cacao butter and of milk butter. To avoid the tendency to become rancid cocoa nut butter is digested with alcohol and animal charcoal by the method proposed by Schlenk; it consists mainly of the glycerides of caproic, caprylic, palmitic, and stearic acids. It is white or slightly yellow, soluble in ether, chloroform, and boiling alcohol, readily saponified by alcoholic potash, and the soap can be salted out.

The following data are given, which do not differ greatly from those of previous observers:

|                       |                               |
|-----------------------|-------------------------------|
| Point of fusion       | .....23°—28° C.               |
| " solidification      | .....14°—20° C.               |
| Fatty acids {         | Point of fusion....25°—27° C. |
|                       | " solidification...16°—18° C. |
| Iodine number         | .....8—8.5                    |
| " " of fatty acids    | .....8.62—8.92                |
| Saponification number | .....253.3—262                |

The butter gives yellow colorations with the reagents of Heydenreich, Hauchecorne, and Brullé, but no reactions with those of Bechi, Baudouin, etc.

The adulteration of ordinary with cocoa nut butter is detected by the number of Reichert, since the proportion of volatile fatty acids in the latter is very small compared with that in the former; the oleo refractometer and the solubility in acetic acid methods have also been applied. On the other hand, the oil of the cocoa nut (coprah) is adulterated with fatty animal oil; it is, however, easy to detect this fraud by the point of fusion, the iodine and saponification numbers, as also by the solubility in alcohol. Adulteration with seed oils can be detected by the iodine number and the reagents of Hauchecorne and Brullé, while those of Bechi and Baudouin serve especially to detect the presence of cotton seed and sesamé oils.—*De Negri and Fabris; Ann. del Lab. Chim. Centr. delle Gabelli.*

# COLUMBIAN EXPOSITION

## Manufactures Building.

It is in the Manufactures building that most of the treasures that relate to pharmacy are exhibited. These treasures consist principally of chemicals, pharmaceutical preparations, perfumes and other toilet goods, etc., many of these being of great interest, and as a rule are very attractively displayed, many novelties also being shown which have been made expressly for exhibition at the Fair.

The exhibits are divided in a general way into two parts or departments, the Manufactures proper and the Liberal Arts, the former being displayed entirely on the main floor, the former mostly in the broad galleries.

### Educational Exhibits.

These occupy the south, southeast and southwest sections of the gallery, and should be of great interest to all visitors. Among the exhibits that appeal directly to pharmacists are those of the pharmacy departments of the University of Michigan and Purdue University.

### UNIVERSITY OF MICHIGAN.

The display in one of the cases of the University of Michigan is devoted to an exhibit of methods of chemical instruction, showing the work of students in chemical bibliography, also apparatus intended to graphically represent the constitution of some organic compounds. Another case is devoted to a quantitative exhibit of the composition of foods and drugs. For example, one jar contains 100 grammes of rhubarb; the several smaller jars beside it contain the various common constituents, and in such amounts as usually occur in this amount of drug. Tea, coffee, guarana, kola, and maté are displayed in the same manner, together with the amounts of caffeine and tannin in each 100 grammes of drug. The drugs, mustard, menispermum, nux vomica, ignatia, guaiac, jalap, podophyllum, and cubeb with constituents are shown in the same manner.

Another case is devoted to medicinal

plants and the drugs yielded by them of the natural orders Ranunculaceæ, Rhamnaeæ, Solanaceæ, Leguminosæ, and Polygonaceæ. The latter case also contains jars of wool fat, including the raw and crude articles, the refined lanoline, and the anhydrous substance, also various forms of suppository machines and suppositories made with

percolators arranged with drug for percolation, and apparatus arranged for the fractional distillation of chloroform, crude petroleum, etc., microscopes, microtomes, mounted slides, and other objects bearing upon microscopy.

Harvard University has a large exhibit embracing 262 chemical compounds, the name and graphic formula of each of which is given.

### CHICAGO COLLEGE OF PHARMACY.

The Chicago College of Pharmacy has an interesting exhibit in the northwest section of the gallery. This consists of a section of the dispensing laboratory of the college with all the apparatus, utensils, and other materials, such as balances, bottles of tinctures, syrups, elixirs, etc., ointment jars, pill boxes, etc. There are also two collections of drugs consisting of 553 specimens of drugs official in the various pharmacopœias, and 180 specimens of rare vegetable drugs. One of the most interesting articles is a facsimile of the copper still used by Dr. Samuel Guthrie in Sackett's Harbor, New York, in 1831, when he discovered chloroform. Many old and rare books on pharmacy are also on exhibition. There is also a collection of drawings of important medicinal plants indigenous to Cook County—in which Chicago is located—which have been prepared by Prof. Goodman, the professor of botany and materia medica of the college. The college also has a

complete file of the recent pharmaceutical journals, including, of course, the AMERICAN DRUGGIST and PHARMACEUTICAL RECORD, and visitors may rest themselves and read at the pavilion.

### PHARMACEUTICAL EXHIBITS.

The various United States exhibits of pharmaceutical products are located in the northwest gallery of the building. All of the exhibits are beautifully and tastefully arranged, considerable reliance for display being had to the cabinet-maker's art.

(To be continued.)



EXHIBIT OF TILDEN & CO.

them, all the pharmacopœial salts and 70 organic chemicals as made by students, and drawings of magnified cross sections of several plant stems. Altogether, this exhibit is of very great interest; it might be stated, however, that without very much difficulty the suppositories could have been greatly improved.

### PURDUE UNIVERSITY.

The exhibit of Purdue University is also very interesting though not so extensive. Fifty specimens of chemicals made by students are shown, also some scale salts, fluid extracts, tinctures, tablet triturates,

## New York College of Pharmacy.

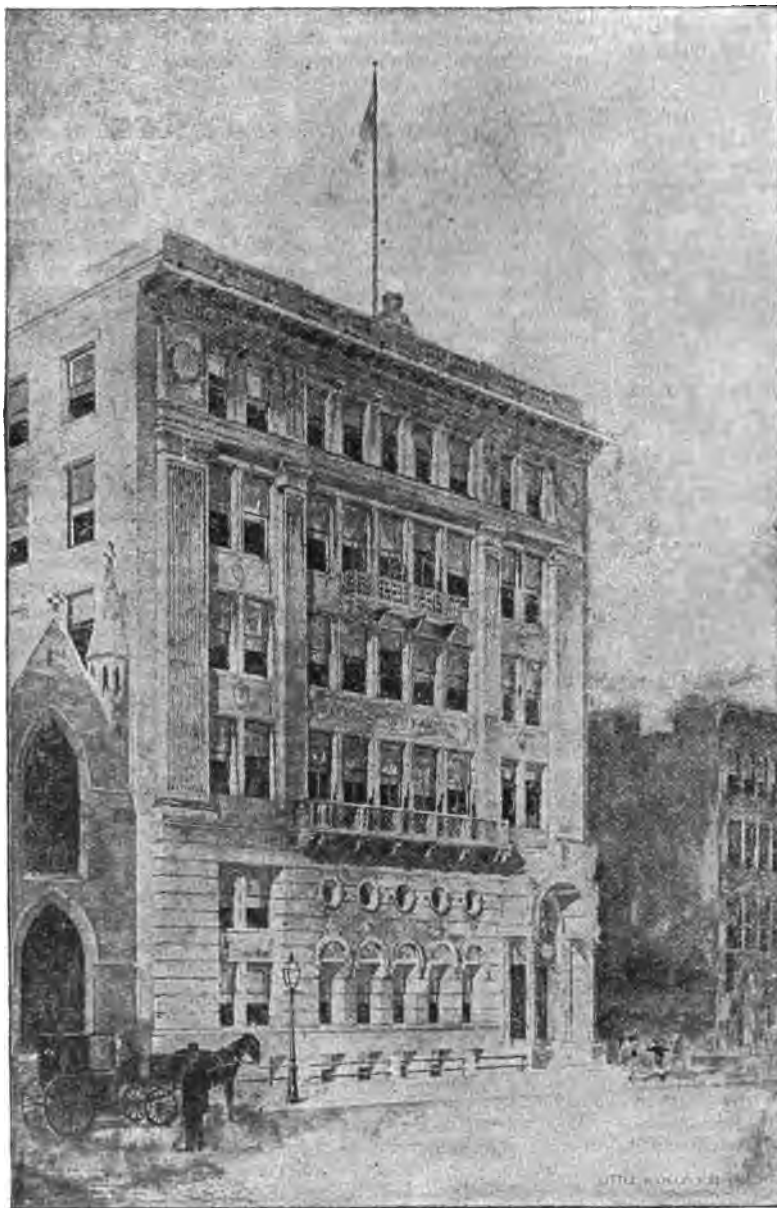
A representative of the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD, who chanced in at the old college building in Twenty-third street the other day, was a little surprised to note the air of bustle and suppressed excitement which seemed to pervade the entire precincts of the usually somnolent old structure. Professors were hurrying in and out of the wired inclosure sacred to Clerk Griffin in a manner which robbed that well-known sanctum of much of its characteristic appearance of reserve, and recalled more than anything else, the den presided over by his erudite co-worker in a similar field, Thomas S. Wiegand, of Philadelphia.

Professor Coblentz was there, alert and keen-eyed, equipped with a whole armful of pharmaceutical periodicals and books, and no doubt more than one choice manuscript concerning his recent investigations in the laboratory, where he is known to spend the greater part of his time. The senior students may have some difficulty in recognizing the professor when they return this Fall for their final course. He has altered his facial appearance considerably by cultivating a beard, and now looks the chemist and investigator more than ever. The class of '94, which, it may be remarked in passing, bids fair to outnumber those of previous years by a fair majority, will have peculiar reason to admire their popular instructor, and this as much by his excellent ability as a teacher as by his personal appearance. Perhaps the busiest person about the building, next to its dusky janitor, was Professor Rusby. A number of boxes, containing many choice and rare specimens of crude and manufactured drugs, had just arrived per steamer from Europe, and the janitor was busily engaged in the work of opening the different boxes. Speaking of this collection, which he was at great pains to procure for the museum of the college during his recent visit to Europe, Professor Rusby remarked that he had spent a good part of the time during his stay in London in visiting the different drug warehouses of that city. The most important of these establishments, it appears, is that under the control of the United East India Company in Crutched Friars, a locality close to the London docks. The establishment referred to is one of exceptional interest to

pharmaceutical visitors, and it is much to be regretted that New York with its many other advantages should lack a place of similar importance to the dealer in drugs. It is a place where buyers congregate, is a veritable market, in fact, where auction sales of drugs in the crude state are held weekly. Professor Rusby has interesting things to tell of the different collections of gums, in ton lots, to be found on one floor of the building; musk, and that most expensive

Rusby is loud in his praises of the editors of the London *Chemist and Druggist*, to whom he took occasion to say he was largely indebted for his introduction to the famous drug warehouses of London.

The opening session of the college will this year be held two weeks later than usual, and, contrary to expectations, will open in the old college building on E. 23d street. The date of opening has been set for Monday, October 16, at 1 o'clock P.M., and the preliminary exercises will be presided over by the president and faculty of the college. January, 1894, will probably see the college installed in its new and handsome building on 68th street near the Boulevard, an illustration of which we are pleased to present in another column.



NEW BUILDING OF THE COLLEGE OF PHARMACY OF THE CITY OF NEW YORK.

of all expensive crude drugs, ambergris, on another; higher up in the building are found rooms devoted entirely to Chinese rhubarb, of which there are two principal varieties, the Shensi, or Shanghai, and Canton, which are in turn subdivided into sun-dried and high-dried. Sponges in bales and cases are also shown on this floor. The rest of the building is taken up with crude drugs of various kinds, including gums benzoin, sang-draconis, New Zealand kauri and numerous others. Professor

## Errors in the U. S. Pharmacopœia.

The following additional errata have been brought to our attention since the publication of the error regarding pepsin in the issue of September 21.

*Diluted Alcohol*: The specific gravities of diluted alcohol at different temperatures are thus stated in the new pharmacopœia, *viz.*: About 0.936 at 15° C., about 0.937 at 15.6° C., and about 0.930 at 25° C. This is absurd and should read:

About 0.937 at 15° C., about 0.936 at 15.6° C. and about 0.930 at 25° C.

*Vinum Aromaticum* should be added to the list of articles dismissed from the pharmacopœia.

The directions for making *Tinctura Cinnamomi* should read as follows:

Mix the glycerin with 750 Cc. of alcohol and 200 Cc. of water. Having moistened the powder with 50 Cc. of the menstruum pack it in a conical percolator, gradually pour on *the remainder of the menstruum*, and after-ward more of a mixture of alcohol and water, etc.

The words in italics should be inserted in their proper place in the text of the U. S. Pharmacopœia.

For the information contained in this note we are indebted to Dr. Golding, of the Brooklyn College of Pharmacy.

NEW YORK CITY BOARD.—At the September meeting the following applicants passed satisfactory examinations: Thos. Crittenden, Bela Kramer, Wm. Kirkpatrick, Emil Luek, Siegfried Blumberg and J. W. Clemens.

## With the Advertisers.

### The Profit of High Prices.

Hance Brothers & White say: "It is a question whether the profit of high prices, or the good-will of low prices is worth more to you. We think the good-will is worth more than the money to us, but you must judge for yourself.

"We want your good-will; we show that we want it by giving you a double money's worth. And then we go out of our way to help you get double for it. No, it is not out of our way. It is our way to make our preparations as profitable to you as possible.

"Here we are paying the printer to tell you how to make five times as much as we do on our own merchandise.

"This is one of our 'Helps', 'Frog in Your Throat' 10c. is another, the 'Sugar Blocks' are another, another sort. If these work well for both of us we shall not be strangers."

### Hot Soda Apparatus.

James W. Tufts, Boston, Mass., announces the approach of Winter with a new and handsomely illustrated catalogue of hot soda apparatus. Many of the new designs are in tile of different colors and beautiful modeling. The "Crater" is one of the prettiest designs we have yet seen, being mottled in colors of soft brown and green and bearing the figures of stags and their young in the act of drinking, and in repose. The "Therma" is likely to be a favorite as embodying a number of improvements and being exceedingly neat in design. A descriptive catalogue of the different designs will be forwarded on request to any druggist mentioning this paper.

### Homeopathic Vials.

Homeopathic vials are the principal products of the Standard Flint Glass Works, 1120-1128 Charlotte street, Philadelphia, Pa., in the manufacture of which they probably distance all competitors. A peculiarity of their ware is the great absence of breakage, and it is a known fact that inferior vials will break when exposed to atmospheric changes even when filled and ready for the market.

The "Standard" homeopathic patent lip vials, screw neck and other vials are made of "lead" flint glass, being stronger, tougher and brighter than any other glass made, are finished with heavy lips and bottoms, and are packed with strawboard between each row of vials, thus also insuring almost absolute freedom from breakage in rough handling during transportation.

The vials are packed in one gross pasteboard boxes and in cases of 100 gross of a size. Write them for prices and special discounts stating quantity, and if convenient send samples; particularly when special sizes are needed it is preferable to have sample.

Among their list of customers the largest consumers in this market and pharmaceutical chemists, pill, tablet and triturate manufacturers, wholesale druggists, perfumers and others can place their orders with confidence and the assurance of lowest prices, prompt shipment and careful attention to their wants in every detail.

The manufacture of glass tubing is a specialty with them and in the accuracy of which their workmen have excelled all others. Glass tubes are drawn from 150 to 200 feet in length without any mold.

In addition to the above a full line of glass syringes are made styled "All Glass," "Jet Cap," "Screw Cap," etc., also all styles of inhalers made from tubing. Test tubes, pipettes or medicine droppers, acid and medicine tubes, stirring rods, specialties in dairy testing apparatus, scientific glassware, etc. Write them for prices mentioning the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD.

### The E. L. Patch Co.

The E. L. Patch Co., of Stoneham and 91 Broad street, Boston, Mass., have issued a circular to advertisers requesting suggestions as to how the firm may render better service. They request druggists who have never visited their laboratories to write for a visiting card, which entitles the bearer to visit and inspect the works. These cards can be obtained at the Boston office, No. 91 Broad street. They especially request all who have not yet tried their goods, or investigated the advantage of dealing with them, to send on a trial order. A catalogue containing a full list of the goods manufactured by the E. L. Patch Co. can be obtained on application to either of the addresses given above.

### The World's Fair a Success, but it will Soon Close its Gates Forever.

The grandest exhibition of our time and possibly for many generations to come will soon be brought to an end.

There remains but one month in which to visit this marvelous gathering of all the world's productions, and everybody should strain a point to go to Chicago.

The railroad fare heretofore has been considered a hindrance to all classes, but this has all been changed, and on the following days in October the West Shore Railroad will run high-class excursions on its fast express trains in through cars at one-half its lowest fare, *i. e.*, \$17.00 from New York to Chicago and return; and proportionately lower rates from points along its line. These magnificent excursion trains will be in charge of an agent whose duty it is to care for the interests of the company's patrons en route, to furnish detailed information as to accommodations obtainable in Chicago, and to point out the historic points along the grand old Hudson

and through the picturesque Mohawk Valley.

These trains will leave Franklin street, New York, at 10 A.M., and West 42d street, at 10.10 as follows: Wednesday, October 4; Tuesday, October 10; Saturday, October 14; Thursday, October 19, and the last, Monday, October 23.

If our readers will just take trouble to call at any West Shore office they will be received with the usual courtesy that characterizes the employees of this superb route (over which a journey of the kind referred to can be made with considerable ease, owing to the fact that the management of the West Shore Railroad has spared no expense to make it the easiest running and safest road in the world), and furnish any information desired appertaining to this trip.

### Perfumery Display.

The show windows of J. N. Hegeman & Co.'s well equipped pharmacy at Broadway and 30th street, New York, are usually decked out with a choice selection of proprietary preparations either of the firm's own manufacture or the products of well known and reliable firms. That a good deal of care is exercised in the selection is always evident. Patent medicine men are fully aware of this and have on more than one occasion made tempting offers for space in which to exhibit their specialties. J. N. Hegeman & Co. have, however, always refused to exhibit goods at the solicitation of manufacturers or agents, and as a consequence the goods which do find space are invested in some instances with a merit out of proportion to their real value. So much for the character of the place of display. This week the firm has a display of more than ordinary attractiveness, and one which will prove particularly tempting to prospective lady customers. It consists of a charming arrangement of perfumery and perfumery flasks, the latter in all that originality of design so characteristic of the well-known maker of American perfumes and soaps, Theo. Ricksecker, of Maiden Lane, New York. The long flasks of delicate colored glass encircled with golden rings and slender gilt chains make a peculiarly attractive display and one which we think would be difficult of duplication by even the most finished productions of the French artist, who, it may be remarked, has heretofore been credited with turning out the very finest work of this kind. Theo. Ricksecker has reason for congratulation on the thoroughly artistic appearance of his goods, and well deserves the success which has attended his efforts.

### Lanolin in the U. S. P.

Lanolin is official in the seventh edition of the U. S. Pharmacopœia under the title *Adeps Lanæ Hydrosus*.

### New York Society of Apothecaries.

At the last regular meeting of this society held on Wednesday, October 4, the following officers were elected for the ensuing year, viz.: president, T. E. Fraser; vice-presidents, Ferd. Lascar, I. C. Bryant, H. V. Myers; secretary, Francis B. Hays; treasurer, T. P. A. Kelly.

### Consul C. S. Hazeltine.

The selection of Dr. Charles S. Hazeltine, of Grand Rapids, Mich., to represent this country as Consul to Milan is meeting with very general approval. Dr. Hazeltine is the senior member of the well-known firm trading as Hazeltine & Perkins Drug Company in Grand Rapids, and well qualified to perform the duties for which he has been selected.

The "Manhattan Pharmacy" is the title of a new drug store opened in the brick building of the Long Island Railroad Company at 419 East 34th street. The managers of the new establishment are somewhat averse to publicity and do not expose their names anywhere on the building or about the store. It is conducted on the "cut rate" principle by George H. Cheseboro, a licentiate of the State board.

### Mr. Major Explains.

To the Editor of THE AMERICAN DRUGGIST.

SIR: I saw the report of the A. P. A. in your recent issue and I wish to make an explanation lest some one might misconstrue the position assumed by me at that meeting.

One of the members has done his best to impress upon the other members that my intention was to offend the association. I wish to state it was nothing of the kind. The paper that was read at the meeting was very good and there was no one in the meeting that appreciated it any more than I did; it was well worth the respect of the A. P. A. and it must have been understood that the remark I made in regard to it was made on the impulse of the moment as a joke. I realize that the profession of pharmacy is a benefit to mankind; everybody knows that the saloon business is not a benefit to any one, and that was the sense of the paper that was read; that pharmacy was not only a business, but a profession, which is a benefit to the people in general. This I admit, and thought I had made a point in favor of this profession when I made that remark that he should have made an exception to the saloon keeper.

As I am an enthusiastic prohibitionist I made the joke without giving it the second thought. If I had thought there would have been any record of it I would not have made the remark, and this is the reason why I apologize for the mistake. As soon as I saw that some one misconstrued it, I tried to impress upon the association that I was not classing the profession of pharmacy with the saloon business, as there is no one that has a greater respect for the druggists in general than I have, so I shall feel very sorry if I am misunderstood.

A. MAJOR.

A course in newspaper work is to be one of the features of the University of Pennsylvania during the ensuing year.

### NOTES ON PRICES.

#### Package Prices.

Referring to the condition of the general drug market in his prices current dated October 4, William H. Raser, drug broker and commission merchant, 32 Platt street, remarks that October business opens fairly, with a goodly number of jobbing orders, though little is doing in large lots of goods. Fluctuations in prices have been very few of late. There is a fair jobbing demand for Quinine and values show a hardening tendency; 19 @ 19½c. is demanded for foreign bulk, as to brand, quantity, etc., the higher figure being for B & Sm, which is comparatively scarce in second hands. Some round lots of other brands are yet available at 18½c. cash. Bids of 18c. spot cash have been made for very considerable lots, but the offer has not tempted sellers for some days past. Opium is dull and only moderate jobbing orders are coming to hand. Single cases are quoted at \$2.65, but this figure can doubtless be undermined, \$2.62½ and probably \$2.60 will buy. Broken lots held at \$2.67½, but possibly in 50 pound lots \$2.65 might be accepted. Pure Powd. Opium \$3.30 @ \$3.35 asked as to quantity, etc. Morphine P & W in 25 and 50 dozen lots. I am again able to place orders at 5c. under maker's figures. Camphor—the refiners have just announced a decline to 45c. in bbls. and 46c. in cases. Pure Powdered Cream Tartar, 18½ @ 19c. as to quantity, etc. Balsam, Peru, advancing, up to \$1.50 now asked, but \$1.40 @ \$1.45, and possibly \$1.35 will yet buy in a good sized way. Canada Balsam, Fir—bids are being made of \$3 for round lots; but nothing now seems to be available at that figure laid down here. Most holders are now asking \$3.25 for broken lots, and possibly bbls. could yet be had at \$3.10 @ \$3.15. No change in Oregon Balsam. Ergot is lower. Anise, Italian, is firmer. Russian Hemp Seed scarce on spot at 3c., but to arrive is quoted at 2½ @ 2¾c. Canary Seed, Singapore and Sicily, both are a fraction lower. Conti Soap, owing to quarantine regulations on account of cholera in some Italian ports, shipments are delayed, resulting in present scarcity, and up to 10½c. has been paid for spot stock and more asked to arrive. Can place orders at 9¾ @ 9½c. as to quantity, and would advise our friends to have orders booked now, as it certainly will not be any lower on arrival. American Saffron advanced to 30 @ 32c. Jalap higher. Allspice, Cassia Buds, Cassia Bark, African Ginger, and Nutmegs have all been advancing. Singapore Pepper lower; other spices without material change.

### Review of the Wholesale Market.

NEW YORK, October 11, 1893.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

The past week representing the opening days of the month has not been characterized by anything approaching to the increase of business naturally looked for at this season. The distribution, so far as the large jobbing houses are concerned, has been fairly steady, however, and a better inquiry is confidently anticipated with the progress of the month. Values in most lines have been without important change. Among the lines which have advanced in price or are tending higher and to which reference is made below are:

Ergot, Camphor, Japan Wax, Mexican Sarsaparilla and Opium. The following are reported lower or in weaker position, viz.: Balsams, Lupulin, Lycopodium, Menthol and Saffron.

#### DRUGS.

ACETANILID is meeting with a fair inquiry, and the market has assumed a more settled appearance at the current values of 35 @ 36c.

ALCOHOL is meeting with the usual inquiry and is maintained steadily at previous prices.

ARNICA FLOWERS are in fair jobbing demand at the range of 10½ @ 12c.; the goods are held with increased firmness at the moment in anticipation of higher prices.

BALSAMS COPAIBA, FIR, PERU and TOLU, have not developed any new features since last report. The market is firm for most varieties and a fair jobbing business is reported.

CACAO BUTTER, Dutch, continues held at the range of 33½ @ 34c., with some considerable sales at this range.

CAFFEINE, pure domestic, is quoted \$1.95 @ \$2.05 and citrate \$2.10 @ \$2.15, though an advance is anticipated soon.

CANTHARIDES continue very quiet though there is seemingly no pressure to realize at any concession from previous values, say 70 @ 75c. for Russian and 28 @ 30c. for Chinese.

CASSIA BUDS continue in fair jobbing request with numerous sales of prime quality at 19c.

CUBEB BERRIES are easier and the demand is light and unimportant. For ordinary grades 20c. is yet asked and for S & S 24 @ 25c.

ERGOT has weakened considerably during the interval, and we are now quoted 30 @ 32c. for German and 38 @ 40c. for Spanish.

LYCOPodium is a trifle easier owing to a slight competition from outside holders; single cases are obtainable in instances at 58 @ 60c.

MENTHOL is scarce and maintained with some firmness at the range of \$3.90 @ \$4 for ordinary Japanese.

MARRUBIUM is maintained in steady position at the current range of 4¼ @ 5¼c., the latter for goods of extra quality.

MORPHINE in the hands of outside holders does not offer below manufacturers' prices, and a fair distributive trade is reported.

OPIUM in large quantities is finding less inquiry, and the market in consequence is easier in tone with \$2.60 asked for single cases. For jobbing parcels \$2.62½ @ \$2.65 is now asked. Powdered is unchanged from \$3.30 @ \$3.35.

QUININE continues in fair, steady request for consumptive purposes at hardening figures. In a quantity way foreign is finding sale at 19c. cash, or 19¼ @ 19½c. regular.

SAFFRON, American, is firmly held at 30 @ 32c., the available supply being closely concentrated; numerous small sales within the range.

SENNA, Tinnively, new crop, has appeared in the London market and sold at an advance due to strong competition.

TONKA BEANS, Angostura, are in moderate demand with sales at the range of \$1.75 @ \$1.90 as to quality.

VANILLA BEANS are passing out into consumptive channels with considerable freedom and the market is regarded as firm at \$6 @ \$13 for Mexican in can lots as to quality, cut \$4.50 @ \$6.50, and Bourbons \$3 @ \$8.

#### DYESTUFFS.

CUTCH, SM, is taking on a firmer tone, and 4½ @ 5c. now appears to be the normal range for quantities.

GAMBIER continues dull, but the market is steady at 3½ @ 4¼c.

INDIGO is finding a moderate inquiry for forward delivery, but spot goods are neglected.

NUTGALLS, Blue Aleppo, are finding sale in a small way at 14 @ 14½c.

SUMAC is firm at the previous range of \$70 @ \$75 for Sicily.

#### CHEMICALS.

ALUM is in steady moderate request, with the sales at \$1.05 @ \$1.75 for lump and \$1.75 @ \$1.80 for powdered.

BLEACHING POWDER continues very quiet. German offers at \$2. @ \$2.05 and English at \$2.12½ @ \$2.25, but the demand is confined to small and unimportant lots.

BORAX has advanced slightly due to the action of the combination of producers on the coast. California crystals are now quoted 8¼c. and powdered 8½ @ 8¾c.

BRIMSTONE, crude seconds, to arrive and forward shipments, is held with increased firmness, \$18 being required by importers generally. Spot stock is reported very scarce with the price nominally \$18.50.

CHLORATE OF POTASH is firmer, and 15c. is now quoted as an inside price for crystals and powdered.

CITRIC ACID continues to offer from second hands at a cut below manufacturer's prices, without, however, attracting important attention.

CREAM TARTAR continues very quiet, though the quotations of the market are nominally unchanged.

MERCURIALS are showing an easier tendency, and ointment 50 per cent. is now quoted 37 @ 39c.; 33½ per cent. 28 @ 30c. Blue pill is also lower at 32 @ 34c.

NITRATE OF SODA continues in limited request, but the market is seemingly firm in tone, with \$1.85 @ \$1.90 generally required as to quantity spot, and \$1.95 to arrive and forward shipment.

OXALIC ACID is developing a firmer feeling and a better inquiry, though supplies are yet obtainable at the former range of, say 6½ @ 6¾c.

QUICKSILVER is held in steady position, with 52 @ 53c. quoted as to quantity with a fair distribution to jobbers.

SODIUM BICARBONATE, English, is well sustained at the recent advance to 3½ @ 3¾c. Domestic yet offers at 2.90c. @ 3c. as to quantity.

#### ESSENTIAL OILS.

ANISE continues held at \$1.37½ @ \$1.40 with a fair distribution in a jobbing way.

CASSIA remains quiet but steady at 75 @ 80c.

CUBEBS can yet be purchased at \$2, though \$2.10 is asked in some instances.

CUBEBS has declined materially in the interval and is now quoted \$2 @ \$2.10.

LEMON is meeting with a fair inquiry at \$1.15 @ \$1.20 as to brand and quantity.

PENNYROYAL is dull and easy with \$1.10 @ \$1.15 quoted as acceptable.

PEPPERMINT, bulk is selling fairly in jobbing quantities at the range of \$2.15 @ \$2.35 as to quality.

SPEARMINT is easier owing to reports of a good crop yield for the present season.

#### GUMS.

ALOES are inquired for to a moderate extent. The stock of both varieties is under pretty good control and held at full previous prices.

ARABIC continues quiet and without quotable change.

ASAFCETIDA is improving in demand and prices are hardening. For best quality up to 22 @ 25c. is asked. Inferior goods can be purchased down to 12½ @ 15c.

CAMPOR is dull, and 45 @ 46c. is now an outside price for barrels and cases.

CHICLE is inquired for to some extent; among recent sales are 1,000 lbs. at 24c.

SHELLAC is in improved statistical position, the demand for jobbing quantities being better. Values for the different marks have undergone no quotable change.

TRAGACANTH is attracting no special attention at the moment and the tone of the market is easy.

#### ROOTS.

GINGER, Jamaica, is firmly held and offered sparingly at the previous range.

GENTIAN has been in moderate jobbing demand with the current sales at 3½ @ 4c. as to quantity.

GOLDEN SEAL has been passing out freely into channels of consumption, one sale of 2,000 lbs. at 19c. being included among recent transactions. The regular quotation now stands at 20c.

IPECAC continues to offer at \$1.19 @ \$1.22½, though trade requirements are light.

JALAP is firm at 28 @ 30c., the stock being small and concentrated.

SARSAPARILLA is easier and we are reported a sale of 8 bales Mexican at 8¼c. The jobbing quotation is 9¼c.

SENEGA continues quiet at the range of 33 @ 35c.

#### SEEDS.

CANARY is dull at nominally 2 @ 2¼c. for Smyrna.

CELERY is firm and meeting with fair inquiry at the range of 12½ @ 13c.

CORIANDER is in moderate demand at the range of 4 @ 4¼c., the former for unbleached.

HEMP, Russian, is developing an upward tendency due to the scarcity; 3½ @ 3¾c.

POPPY is dull at nominally 7c. for blue.

## Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted free of charge. Write distinctly, on one side of paper only, and do not use postal cards.*

#### POSITIONS VACANT.

WANTED—A good salesman visiting the drug trade to sell our wines and brandies as a side line. Glen Wine Co. (Limited), Hammondsport, N. Y.

#### POSITIONS WANTED.

PHARMACIST'S RELIEF—For evening and Sunday relief work. J. Maxwell MacDonald, 339 Dean street, Brooklyn.

POSITION wanted by young man in retail drug store; three years' experience; "unlicensed"; can furnish best references. Address "Smilax," 67 East Main street, Waterbury, Conn.

REGISTERED in New York; four years in present position; change of firm lets me out soon. C. M. Lawrence, Salamanca, N. Y.

A YOUNG competent pharmacist, graduate of N. Y. C. P. class of '93, wants position as a permanent clerk; moderate salary; can furnish best of references. Address L. Ambos, 1600 Avenue A, New York.

SITUATION WANTED by young man 25 years of age; 10 years' experience; licensed in New York State; can furnish the best of references; South preferred. Address "Cassia," at this office.

YOUNG MAN, 21 years of age, wishes permanent position with good reliable druggist; four years' practical experience; also can fill prescriptions salary moderate. Address Charles C. Dailey, Box 74, Harper's Ferry, W. Va.

DRUGGIST of 20 years' experience desires to represent first-class houses as distributing advertising agent for Southern California; also call on trade if desired; large acquaintance with physicians and the drug trade; best of references; correspondence solicited. Address "Traveling Salesman," Room 12, 107 N. Spring street, Los Angeles, Cal.

POSITION WANTED.—Junior clerk, having 4½ years' experience in the retail drug business, desires a situation in drug store, city or country; speaks German and English; age 20 years; can furnish good references. Address "Salophen," 35 S. 15th street, Newark, N. J.

DRUG CLERK—Lady graduate, experienced, wishes position in drug store or dispensary; A1 references Call or address, Breen's Pharmacy, 2300 Seventh avenue, New York.

#### BUSINESS OPPORTUNITIES.

WANTED—To buy, half interest in good paying drug store in Texas. Address, at once, W. LaRine, Athens, Texas.

OLD ESTABLISHED drug store to rent, repainted and stocked; new "soda" apparatus (no cutting); Hudson River town; opening for a first man, on main street. "F. A. G.," 236 Liberty street, Newburgh, N. Y.

I WANT to Buy a drug store in city or country doing \$30,000 or \$50,000 a year; will give in exchange good improved real estate. Address "Hawkins," 33 Orchard street, Newark, N. J.

FOR SALE—Nicely furnished drug store in Rochester, N. Y.; good location on one of the main thoroughfares; doing nice business; proper reasons for selling given. Address "Drug Store," at this office.

FOR SALE—In Baltimore, Md., drug store and dwelling, together or separate; an excellent opportunity for Hebrew; two synagogues in neighborhood; prominent corner; good Hebrew trade; it is worth looking into; good reasons given for retiring. Address "I. V. A.," care AMERICAN DRUGGIST, 37 College place, New York.

I WANT to buy a drug store, prefer Pennsylvania, with \$3,000 to \$6,000 stock; will pay cash; must do at least \$10,000; profit \$3,500 at least. Don't write without you have got the article. E. E. Hyer, Lock Box 18, Galeston, Pa.

FOR SALE—Drug store situated in a mining town of about 500 inhabitants; invoice about \$500; stock low at present; good chance for the right man; want to sell at once; reason, not registered. Call on or address C. L. Thorn, Winburne, Pa.

Several letters await "Apioi" at this office.

Clerks and Employers should call at this office, register their wants and examine our list of POSITIONS WANTED POSITIONS VACANT and BUSINESS OPPORTUNITIES, which can be consulted free of charge.

# American Druggist and Pharmaceutical Record.

A JOURNAL OF PRACTICAL PHARMACY.

Vol. XXIII. No. 16.

NEW YORK, OCTOBER 19, 1893.

WHOLE No. 269.

## AMERICAN DRUGGIST PUBLISHING COMPANY.

37 COLLEGE PLACE, NEW YORK.

A. R. ELLIOTT, PRESIDENT.

Subscription Price—For the United States and Canada, - \$2.00  
If paid in advance direct to this office, 1.50  
" " for Foreign Countries, - - - 2.50  
Single Copies, - - - - - .15

The "American Druggist and Pharmaceutical Record" is issued on Thursday of each week. Changes of advertisements and all copy for publication should be received before Tuesday of each week.

We are not responsible for any money paid to agents. All remittances should be made direct to this office. Express Orders, Post-Office Orders and Drafts on New York should be made payable to the "American Druggist Publishing Company" and addressed to them at 37 College Place, New York.

*Liberal Commissions to Club Agents.*

IT is really very amusing to note the air of thorough (?) familiarity with things medical which many proprietary medicine makers display in their advertisements. One of the most conspicuous examples is that of a well-known firm who make and advertise a cod-liver oil emulsion. In an advertisement now running in the magazines, we are told that "Growing children must have the kind of food found in —'s Emulsion, or they will be thin and poorly developed." This is making the malady fit the remedy, with a vengeance! We shall next expect to see So and So's Infants' Food recommended for "that tired feeling."

## THE WHOLESALE DRUGGISTS.

THE National Wholesale Druggists' Association, and what might in the language of a distinguished Southern editor be called its "independent but correlative and concomitant auxiliary," the Association of Manufacturers of and Dealers in Proprietary Goods have met, have resolved, have banqueted, and have adjourned to meet next year in New York City with F. A. FAXON, of Kansas City, as president.

An extended account of the proceedings will appear in a later issue. For the present, however, it may be interesting to note that the contract or rebate plan has received a strong endorsement and that a plan has been formulated which is a decided step in the direction of aiding the retailer in his struggle against the growth of the practice of cutting.

## A VOICE FROM DUBUQUE.

WHAT is it that has come over the brilliant, the aggressive, the outspoken advocate of the retailer, W. H. TORBERT, of Dubuque, loved of gods, of men, and—of ladies? After his ardent advocacy of action at the White Mountains these words from him (in his report as chairman of the N. W. D. A. committee on retail protection) have a foreign sound:

There was no need of any action of the committee where no cutting occurred, and this covers about 90 per cent. of all communities in this country. In the remaining 10 per cent. all the communities where cutting exists under the resolution authorizing the appointment of the committee and determining the scope of its action, the committee could take no action except in cities or towns where there was organization in accordance with the action at Montreal.

Your committee recognizes that the majority of such cities were wholly without organization, and that organization must precede their action, and that such organization to be valuable must not only obtain in one community, but in all others, else the city unorganized would be the base of supply for the organized city.

Your committee would respectfully recommend the adoption of what is known as the Detroit plan, and which is more fully set forth in the report of the Proprietary Committee.

Your committee wish to reaffirm the active interest and the hearty co-operation of the National Wholesale Druggists' Association with all wise and judicious efforts of the retailers to improve the conditions and increase the profits of retail pharmacies everywhere.

## A BETTER OUTLOOK.

PERCY C. MAGNUS, of New York, who has been busily engaged in canvassing the trade in Philadelphia, Baltimore, Washington, Pittsburgh, Columbus and Cincinnati, O., during the past fortnight, has made a very close and careful study and investigation as pertains to the drug interest at each point; and states as the result of his observations that the general drug line has suffered very little during the recent depression; the trade, with a very few exceptions, all speaking in a very hopeful and cheerful manner in regard to business. He thinks that the outlook for holiday trade is certainly very favorable, most of his accounts buying very freely, and paying very promptly.

A return of commercial prosperity will follow a return of confidence, and this must be brought about first by individual action. Let every one do what lies in his power to promote this feeling of confidence and we will soon speak of the financial stringency in the past tense. Already there is an improvement noticeable, and this must be fostered.

## PHARMACEUTICAL NOTES.

**A Milk Dressing for Burns.**—Milk has been recommended as a dressing for burns, to be applied by means of compresses. The dressing is to be renewed night and morning. Under this treatment the reduction of the size of large burns has been marked and speedy. This suggestion may serve as a valuable one for country practitioners when their accustomed remedies for burns are not at command.

**Mercurial thermometers for high temperatures** are now made (*Ber. d. D. Chem. Gesell.*) which will register as high as 550° C. This end is obtained by having the capillary tube of mercury under a strong pressure of compressed nitrogen. Though made of very hard glass the tube becomes so soft at a temperature of 550° C. so that the outward pressure of the compressed gas expands it, thus introducing an error.

**Tolpyrin and Antipyrin.**—These homologues, obtained in similar manners, resemble each other greatly. An easy method of distinguishing them is, therefore, useful. A weak solution of tolpyrin is rendered turbid by the addition of soda solution, while antipyrin is only precipitated in strong solutions. If a mixture of tolpyrin with antipyrin is suspected, the melting point will indicate it, since it melts below the melting point of antipyrin.—*Pharm. Zeitung.*

**Sublimate as a Disinfectant in Dwellings.**—In Stockholm dwellings are now disinfected by means of corrosive sublimate, some 3 to 4 grammes (45 to 61 grains) being used for each room. Sjöqvist (*Aerts. Prakt.*) has examined the urine of a number of inhabitants of disinfected rooms and has found mercury present in two cases only. The sublimate is found to be only very slightly volatile at the room temperature, and a year after the disinfection sublimate was found in large quantities in the wall papers.

**Chestnut Tannin.**—In the consular report on the trade of Cherbourg and district for 1892, it is stated that the export of an extract from the bark of chestnut trees used for tanning leather, is developing, having reached 150 tons to 200 tons per month, while on the opening of a new factory at Dinan it was expected that these figures would be doubled. It will be remembered that the tannin of the chestnut tree was found by Trimble to resemble gallo-tannic acid in all its reactions, so that the substances are probably identical.

**To Keep Ants Away.**—Rub a light film of balsam Peru around near the bottom of table or kitchen safe legs—just a narrow band will do—and renew the balsam every two or three weeks. This will keep ants away from tables, kitchen safes, etc., and what they hold or contain; provided there is no other ant way than up the legs. One drop balsam Peru spread around the upper part of a syrup bottle will keep the ants away for months. Boil one ounce balsam Peru in one gallon rain water for half an hour and sponge this water while hot over wooden floors and walls and it will keep ants away for a long time.—*Scientific American.*

**Salol Camphor.**—This is described in the "Extra Pharmacopœia" as a viscid liquid (salol 3 parts, camphor 2), but Barnouvin insists that the solid form is preferable. He shows that mixtures of salol and camphor crystallize rapidly in proportion as the quantity of salol is increased, and he suggests that 10 per cent. only of camphor should be used. The two substances are powdered, melted with a gentle heat and

left to crystallize. This occurs in about a quarter of an hour, and by repeatedly spreading upon filter paper, brilliant, dry, white crystals result and may be powdered. In this form the salol camphor is said to admit of several therapeutical applications for which the liquid form is not available (*Repertoire* [3], v., 388).

**Utilizing Gas Tar as a Disinfectant.**—Danilewsky (*Pharm. Zeit. f. Russ.* 1893, p. 485) recommends the following as being much preferable to the process of Nenski and Rapschenski. Slake 750 grammes (say 75 ounces) of burnt lime, with about 1,250 to 1,500 grammes (125 to 150 ounces) of water, and when thoroughly slaked add 500 grammes (50 ounces) of tar in divided portions, stirring well after each addition for a quarter of an hour. The result is a light yellowish brown mass, from which the disinfecting fluid can be prepared by stirring well with water, allowing to settle, and decanting the clear "phenol-calcium" or lime carbolate water which separates off after standing an hour. This disinfectant is at the same time cheap, available and efficacious.

**Iodoform Emulsion.**—Emulsion of iodoform is sometimes prescribed as an injection in certain kinds of fistula, and may be best prepared as follows:

|               |         |
|---------------|---------|
| Iodoform..... | 3 parts |
| Starch.....   | 1 part  |

Triturate in a mortar until a fine powder results, and then add the following mixture:

|               |          |
|---------------|----------|
| Glycerin..... | 20 parts |
| Water.....    | 12 parts |

Warm gradually, and stir constantly until 133° C. is reached. The resulting emulsion will be 10 per cent. and is very stable. Moreover, it is found to act more energetically than the emulsion prepared in the ordinary way.—*Journal de Pharmacie d'Anvers.*

**Separation of Iodine.**—The following gargle was recently prescribed (*Jour. de Pharm., d'Anvers*, 1893, p. 212): Iodine, 25 cgm.; potassium iodide, 1 gm.; tannin, 2 gm.; potassium bromide, 10 gm.; distilled water, 50 gm.; glycerin, 50 gm.; oil of peppermint, 20 drops. In dispensing this, if the four solid substances are pulverized and mixed, then dissolved in the glycerin and water, a product is obtained in which the iodine has completely separated. This inconvenience can be avoided by mixing intimately the iodine, the iodide and the tannin, dissolving the mixture in the distilled water, which will require at least two hours, then adding successively the bromide, the glycerin and finally the oil of peppermint. By this procedure a perfectly limpid brown liquid is obtained.—*Through Am. Jour. Pharm.*

**Salol Suppositories.**—The preparation of these articles gives some difficulty unless great care is used. M. Barnouvin calls attention to the fact that salol, which melts at about 40°, remains liquid at a lower temperature, even down to 12° or 15° if kept quiet. Moreover, the true melting point of a mixture of salol and cacao butter (in which the salol is soluble) is much lower than that of either of its constituents. Consequently, a liquid mass, very hard to solidify, results when the ingredients are mixed. He, therefore, recommends that the butter shall be melted and not allowed to rise far above its melting point, at which temperature the salol is mixed in. An easier method is to rub the butter and salol together into a paste in a mortar, and press the mass into the frozen molds.—*Repertoire de Pharmacie.*

**Oxygen Manufacture.**—G. Kassner describes a method of obtaining oxygen from the air by the agency of calcium plumbate,  $\text{Ca}_2\text{PbO}_4$ . This compound, in a spongy porous condition, is exposed to

the action of well washed furnace gases and rapidly absorbs the carbon dioxide present, calcium carbonate and lead peroxide being formed. These products are then heated to redness and oxygen is rapidly disengaged. When most of the oxygen has been liberated carbon dioxide begins to come over, at first mixed with oxygen, but subsequently in a pure state. The mixed gases are passed over calcium plumbate, which absorbs the carbon dioxide and allows only the pure oxygen to escape. When the carbon dioxide ceases to be evolved from the retort a current of air is driven through and re-converts the residue into calcium plumbate, which may then be used for a subsequent operation (*Chem. Zeit.*, xvii., 1242).

**Vanillin from Cloves.**—Professor Jorissen and E. Hairs, noting the similarity in composition between vanillin and eugenol, have examined cloves and the essential oil obtained from them to ascertain whether vanillin was one of their constituents. An ethereal tincture of cloves was prepared and treated with solution of sodium acid sulphite. This solution, being separated, was then treated with a mineral acid and the sulphurous acid thus liberated removed, after which the mixture was agitated with ether. This, on being separated and evaporated, left a residue which gave off a strong odor of vanilla. A similar crystalline residue was obtained on subjecting oil of cloves to the same treatment. The crystals were soluble in water, especially when warm, also in alcohol and ether. They were colored by ferric chloride, began to melt at 79°, and sublimed readily. The yield was very small, so that an extended examination was not possible, but the investigators consider that the physical and chemical characters of the product, so far as they have been ascertained, indicate its identity with vanillin (*Bull. de l'assoc. Belge des chim.*, through *Bull. de pharm. de Bruxelles*, xxxvii., 231).

#### Japanese Camphor Trade.

The total purchases of foreign exporters reached 1,713 tons, which is below the business of an average year. Prices ruled in favor of Japanese producers, the lowest having been 35 dols. per picul of 133½ lbs. in May, and the highest 63 dols. in December.

These figures represent common crude camphor, which during the year has been doctored and adulterated worse than ever, in spite of high values paid, and the strong protests of purchasers, some of whom now absolutely refuse to have dealings in camphor which has not drained in the warehouses during at least forty-eight hours.

The Formosa drug threatens Japan's monopoly, whenever work in the interior can be conducted regularly and free from the dangerous attacks of aborigines.

The camphor tree of Japan is a huge evergreen of singularly symmetrical proportions and not unlike a linden. Its blossom is a white flower, and it bears a red berry. Some of the trees are fully fifteen feet in diameter, and are upward of 300 years old.

In times gone by, camphor was produced in Sumatra and Borneo, and in other parts of the East Indies, as well as in China; now, however, the crude camphor of commerce is a product of Japan and Formosa exclusively, the Formosa supplies having since the war between China and France been very small and uncertain until lately, when the industry was resumed by a German syndicate, upon concessions obtained from the Chinese Viceroy of the island, leading to increased exportation.

However great difficulties remain to be surmounted before the trade can be depended on, for the trees are

only found inland, where the inhabitants are aboriginal barbarians, who make matters most unpleasant for explorers.

The Formosa drug is inferior to the Japanese, the latter by reason of its greater purity, pinkish color, and bold grain, commanding in foreign countries higher prices, by some 2 per cent. or 3 per cent., in spite of its comparative abundance.

The annual export of Japan camphor averages about 5,000,000 lbs. of which about one-quarter reaches the United States of America either direct or via Europe, the remainder being shipped to Europe, excepting a small quantity sent to India.

The districts in Japan famed for camphor trees are Kiushiu, Shikoku, Iga, Suruga, Isé, and Kishiu. The forests, owned by the people, are now almost denuded of timber, and very little will be left a few years hence. However, the government forests are still very rich in camphor trees, and it has been estimated that this alone will maintain annually, during the next twenty-five years, the full average supply of crude camphor.

Formerly very little care was bestowed upon the preservation and cultivation of this valuable timber. More recently, however, not only the government, but also the people, have been giving to this most important question the attention it long ago deserved. Numerous young trees have now been planted, and their growth is being carefully tended. Consequently, although hitherto the youngest wood from which camphor was extracted was about seventy or eighty years old, it is expected that under present scientific management the trees will give equally good results after twenty-five or thirty years.

The roots contain a much larger proportion of camphor than the trees, 10 lbs. of crude camphor out of 200 lbs. of wood-chips being thought satisfactory. The Suruga timber yields a much smaller percentage.

In a village in Kochi (Tosa) there is a group of thirteen trees about 100 years old; it has been estimated that they will produce 40,000 lbs. of crude camphor, and are worth, as they now stand, 4,000 silver dols.

It appears that the only process of extracting camphor from the wood among the mountains in this empire, and the materials used, are of the roughest and most unscientific description. The wood-chips are boiled, the vapor being conducted into a receptacle containing several partitions, surrounded by cold water. In the sides of these partitions are apertures alternating contrarily, which, when open, cause the vapor to fill the divisions by a circuitous route, thus improving the grain of the camphor.

The crude article is brought to market, as a rule, in very rudely constructed wooden tubs.

To make it fit for shipment requires much work, diligence, and experience. Each tub is carefully sampled, vertically and diagonally, and the samples are tested by fire and sometimes by alcohol. If no solid adulterant is discovered, the condition of the drug is next inquired into, the difficulty of this step being best explained by at once stating that this crude camphor contains a quantity of water, or oil and water, varying anywhere between 5 per cent. and 20 per cent.

This trouble overcome, the rest is comparatively easy, and consists in weighing, cutting, mixing, and packing for shipment, the packing being in tubs prepared on the premises, partly out of the original packages.

Of course the camphor cannot be packed in its present condition; much of it has to be drained and dried, and frequently a special parcel of "dry" must be bought, at a very high figure, for mixing with it.—*British Consular Report.*

# COLUMBIAN EXPOSITION

## Manufactures Building.

(Continued from page 222.)

Immediately opposite the college exhibit is the booth of W. R. Warner & Co. of Philadelphia.

This covers 400 feet of space and is pyramidal in form and is made up of steps forming shelves covered with black velvet, the whole being surmounted by a large molded figure of Mercury. On the shelves are displayed pills in coatings of almost all colors, elixirs, compressed tablets, and fluid extracts which are contained in goblet shaped bottles. An ornamental railing surrounds the exhibit, leaving a four-foot space about the pyramid where visitors may be entertained. This exhibit is simple, but imposing, without any attempt at display of the cabinet-maker's arts or of handsome cut-glass bottles.

The exhibit of Reid & Carnrick, of New York, is in the form of a pagoda of cream with gold and adorned with ornamental brass work. The appointments are in light oak. The products consist of kumysfen, pancrobin, lactopeptin, soluble, good, and the other specialties of the firm. Visiting members of the profession may be regaled with a glass of kumys prepared from kumysgen.

The exhibit of Sharp & Dohme is in the form of a square pavilion with light oak furniture. The exhibit proper consists of pills, tablets, and other pharmaceutical specialties, most of which are displayed in inverted show jars. The large glass pyramidal case in front contains pepsin—Webber—in three forms, scale, granulated, and powder. Two of the tablet machines of the Oriole Tablet Machine Co. are also on exhibition.

The exhibit of F. Stearns & Co., of Detroit, is in the form of a rectangular booth with nine tall oak cases all about the sides, leaving an opening in front. The most conspicuous object in the exhibit is an immense Japanese umbrella covering the greater portion of the pavilion. One of the front cases is devoted to perfumes in large cut-glass bottles and in bottles of the regular style, the perfume tester also being shown. The other cases are devoted to pills, elixirs, tablets, fluid extracts, and all other pharmaceutical preparations. On

top of the side cases are large bottles containing fine specimens of the drugs, cedron seed, scammony root, guarana, calendula, cassia fistula, kola nut, jalap, pichi, etc. Among the specialties are wine of cod liver oil with iron peptonate, cascara aromatic and non-secret remedies.

The exhibit of John Wyeth & Brother, of Philadelphia, is installed at the end of the section on the west side of the aisle and is displayed in several tall ebonized cases of unusual dimensions. This exhibit is very

illustrations of this firm. This display was illustrated on page 222 of our issue of last week.

(To be continued.)

## Missouri Valley Wholesale Association.

The Wholesale Druggists' Association of the Missouri Valley met at the Commercial Club, Omaha, Neb., on September 9.

The organization includes jobbing druggists from Sioux City, Omaha, Council Bluffs, Atchison, Lincoln, Kansas City, St. Joseph and Hastings, and meets three or four times a year on a social basis.

The association met on Saturday morning and discussed various matters, adjourning for luncheon, which was had about 2 o'clock, after which an afternoon session was held, continuing until about 4 o'clock. At that time the members and their guests adjourned to meet at the office of the Richardson Drug Company for a trip to Courtland Beach. Most of the visiting members returned in time to take evening trains for their respective homes.

C. F. Weller is president of the organization, and Charles J. Daubach, secretary. Among the members and guests present were:

Messrs. E. E. Bruce, C. F. Weller, F. N. Ferguson, Maryland, S. M. Ware, H. C. Cole, Eugene Duval, C. A. Starr, J. L. Welshans, E. C. Smith, A. A. Egbert, George Esmond, H. T. Clarke, E. C. Bidwell, F. A. Nash, F. C. Ayer, Omaha; C. J. Daubach and J. P. Carson, Lincoln; J. B. Cesena and C. F. McGrew, Hastings; H. D. Harte and Samuel Haas, Council Bluffs; F. F. Vanatta and Ed. Smith, St. Joseph; F. H. Faxon and H. W. Evans, Kansas City; W. C. McPike, Atchison, and S. O. Parker, Chicago.

## Chicago College of Pharmacy.

The thirty-fourth session of the Chicago College of Pharmacy will begin Oct. 17.

The college has undergone extensive improvements during the vacation and is now in good shape for the Winter's work.

An interesting and instructive feature of the course will be the Quiz classes conducted by members of the Alumni under the auspices of the Alumni Association.

The attendance during past years has shown a steady increase and this year promises to be no exception to the rule.

CULTURE'S INROADS.—Mr. Wabash—"Well, aren't you almost ready?" Mrs. Wabash—"Yes, dear; just as soon as I get my *mouchoir* and my *finde siècle*."



EXHIBIT OF W. R. WARNER & CO.

unique, owing to the shelves forming steps, the shelves and supports being white, and most of the containers being vase-like in form. The various products shown are pills, fluid extracts, elixirs, wines, syrups, tablets and the other many pharmaceutical specialties of the firm.

On the opposite side of the aisle are a number of pharmaceutical exhibits. One of these is that of the Tilden Co., of New Lebanon, N. Y. The booth is square in form and is covered with velvet of red and green tints. The cases located in the interior are of mahogany and contain specimens of the various pharmaceutical prepa-

### The Philadelphia College of Pharmacy.

Edson S. Bastin, A.M., F. R. M. S., formerly professor of materia medica and botany in the Northwestern University (Illinois College of Pharmacy), has been honored by election to the chair of materia medica and botany in the Philadelphia College of Pharmacy, and will conduct the coming course of lectures in the college.

### New York College Alumni.

The Alumni Association of the New York College of Pharmacy is an organization which has not heretofore made itself felt to any great extent in either the interest of its *alma mater* or the advancement of pharmaceutical science. Its officers have probably been too busily engaged in endeavoring to promote the interests of

discussed at this meeting the officers look for a large attendance, and certainly every member of the Alumni Association who has the interests of the N. Y. C. P. at heart should make it a special point to be present. The present officers of the Alumni Association are: President, Herman Graeser; vice-presidents, A. C. Searles, J. G. Needham, Howard L. Wood; secretary, J. C. Nielsen; treasurer, A. Henning; registrar, D. T. Larimore. Three

agency of money matters, dullness of business, sickness in the families of some of the regular attendants and other causes, the number of members present was very small. A new feature was added this year to the regular order of proceedings, which was a number of outdoor sports, such as base ball, quoits, racing, leaping, target shooting, bowling, etc. But, unfortunately, the continuance of a rain storm on Wednesday put a stop to all fun out of doors.

The members present made up in enthusiasm what was lacking in numbers, and every one present pronounced the meeting one of the most pleasant ever held.

A committee on adulterations was added to the regular standing committees. A resolution commending the school of pharmacy just established in Richmond was adopted.

Twenty new members were added, three



EXHIBIT OF SHARP & DOHME.

the organization itself to attend to other and what may have been regarded as extraneous affairs. All this is to be changed, however. The association, under the presidency of Herman Graeser, and with the active and earnest co-operation of such members as Alfred Stover, Fred Hoenthal, D. T. Larimore, Harry Heller and Miss K. C. Mahegin, not to mention others, will, during the present season, make a concerted effort to awaken a more general interest in its affairs, and proposes, among other things, to publish a periodical devoted to the proceedings of the college and its alumni. This was brought forward at a meeting of the Alumni Association held on last Wednesday evening in the college quiz room, and a general meeting for the further consideration of this and other projects looking to the advancement of the association is to be held at the college on the evening of Wednesday, October 25, at 8 o'clock P.M. In view of the important matters likely to be

ladies were in attendance at the last meeting: Miss K. C. Mahegin, Miss Sadie E. McKean and Miss A. Metzger.

### The Old N. Y. C. P.

Once again the doors swing open  
For another college year.  
And the "voice of the professor"  
Falls on many a listening ear,  
And though I've won my light and gained  
My title—Ph. G.  
I wish I were with the boys again  
At the old N. Y. C. P.

Where are now the boys who struggled  
With the "tough exam's" last Spring?  
Throughout the land they brave the blue  
And orange benzole ring!  
But an even bond connects us,  
Tho' far apart we be,  
For we were chums and classmates  
At the old N. Y. C. P.

HAPPY HARRY '93.

### Virginia Association.

The Virginia Pharmaceutical Association met at Blue Ridge Springs, Va., Sept. 13. Owing to continued bad weather the strin-

gencies resigned and a few were dropped for delinquency. President Wills, in his annual address, made some wise suggestions as to a system of apprenticeship.

A pleasant hour was spent on Wednesday evening in one of the hotel parlors, music, recitations, etc., being given. A most excellent and instructive paper on "Quinine Historically," by Mr. Robert Brydon, of Danville, was read, also a volunteer paper on the same subject by Mr. Geo. E. Barksdale, of Richmond. Mr. Fleet read a letter from Prof. Attfield giving further information on "Lemon Kali," a subject discussed at the meeting last year. Mr. Fleet also gave a short talk on "the plant used in domestic practice in Virginia called 'sarsaparilla,'" and promised to have a paper on the same subject next year.

On Thursday the sun shone out gloriously, and the fun of the contests for the prizes waxed fast and furious. A base ball match of the Santo-nines against the

Qui-nines was won by the former in a score of 20 to 11. A foot race, long jump, high jump, bowling match, bun-eating match, and leap frog enlivened the hours till night. Many of the most valuable prizes were carried over for the next meeting. M. E. Church offered a handsome prize of \$10 worth of books for the member bringing in the largest number of new members. It was won by C. B. Fleet, of Lynchburg.

The lamented death of Prof. John M. Maisch, who was an honorary member of the association, received fitting comment, and the resolution printed below was unanimously adopted:

WHEREAS we have heard since our meeting began of the death of our esteemed honorary member, Prof. J. M. Maisch, a man whom all true pharmacists delight to honor as well for the beautiful virtues which adorned his life, the uniform urbanity which characterized all his intercourse with his fellows, as for his eminent scientific attainments, and his contributions to the literature of our profession.

*Resolved*, that we mourn the death of our Brother as a loss to our profession, which we cannot estimate or express in words.

*Resolved*, that we will cherish his memory as one who, though honored by the whole world, was never so exalted by the distinctions heaped upon him as to forget the courtesies and kindly offices to the humblest of his fellows, as one whose career seemed an exemplification of the noble maxim:

"Homo sum; humani nihil a me alienum puto."

*Resolved*, that we tender to his bereaved family our warmest sympathy, and hope that they may find consolation in this hour of grief in recalling his life of blameless worth, and in the hope of a blessed reunion with him where pains and parting are no more.

*Resolved*, that these resolutions be spread on a separate page of our proceedings, as published in the journals.

The following officers were elected; President, J. F. Christian, Roanoke; Vice president, W. G. Burgess, Manchester; C. P. Kearfott, Martinsville; D. W. Mahone, Hampton; Jno. E. Jackson, Lynchburg; secretary, C. B. Fleet, Lynchburg; corresponding secretary, W. S. Alfried, Petersburg; treasurer, C. H. Lumsden, Lynchburg; local secretary, A. P. Spickard, Jr., Blue Ridge Springs; executive committee, T. A. Miller, Andrew T. Snellings, W. H. Washington.

The association adjourned to meet at Blue Ridge Springs, second Tuesday in July, 1894.

### Pharmacy Boards.

PENNSYLVANIA BOARD—Henry C. Porter, of Towanda, has been appointed a member of the Pennsylvania Board of Pharmaceutical Examiners.

THE VIRGINIA BOARD OF PHARMACY will meet in Lynchburg, Va., Oct. 23. The examination of candidates will commence at 10 A.M., the 24th.

Parties desiring to appear should communicate at once with E. R. Beckwith, secretary, Petersburg, Va.

MISSISSIPPI BOARD OF PHARMACY.—At the second semi-annual meeting of the Mississippi Board of Pharmacy held in Jackson, October 3, seven applicants for license were examined. Five of these were successful, as follows: I. W. Hosmer, S. C. Tucker, C. A. Wells, J. K. Armstrong, and Geo. M. Lackey.

KANSAS BOARD.—At the recent meeting of the Kansas Board of Pharmacy held at Topeka, Sept. 6, the following applicants passed a satisfactory examination

and were granted certificates. As registered pharmacists:

A. E. Barnes, Topeka; E. G. Armsby, Atchison; G. F. St. John, Independence; G. L. Brown, Idaho; A. G. Sexton, Clyde; W. J. Cattell, Tescott; D. Deford, Ottawa; E. E. Ransopher, Clyde. As assistant pharmacists: R. D. Elmore, Nortonville; A. C. Smith, Topeka; J. R. Myers, Clay Center; M. H. Witt, Abilene; C. S. Williams, Soldier; W. T. Grove, Virgil; John Seufert, Barnes; N. E. Ferguson, Winfield; G. H. Lawton, Atchison; L. I. Kendall, Newton; F. D. Cass, Sedan; M. A. Funchess, Horton; Carl Engle, Manhattan; M. W. Friedenburg, Atchison; H. G. Lamaster, Hutchinson; G. S. Annabil, Inman; C. B. Brayman, Paola; F. T. Walker, Topeka; G. F. Gehrun, Atchison; W. C. Johnston, Winfield.

The next examination for registration will be held at Concordia, Dec. 6, 1893.

Applicants should file their applications with the secretary at least five days before the date of meeting.

For further information address, H. W. Mehl, secretary, Leavenworth, Kan.

MINNESOTA BOARD.—At the last meet-



JOHN MCKESSON, SR.

ing of this board the following candidates passed a successful examination and were registered as pharmacists and assistant pharmacists:

#### PHARMACISTS.

Fred. J. Matthie, of Minneapolis; William J. Camden and Willis Rheinhardt, of St. Paul; Gustav J. Gillen, of Halstad; Andreas Stromsoe, of Morris; George H. Woodgate, of Slayton; and Elemer Heyerdahl, of Rochester.

#### ASSISTANT PHARMACISTS.

Harvey B. Miller, James Bergquist, Richard T. Dukelow, T. J. Erickson, H. H. Hazeltine, Adolph D. Krause, Alfred C. Siewers, William Kubat, Fred J. Lenz, Frank Lemmer, Charles B. Wilkes and Leslie A. Hanes.

WASHINGTON BOARD.—At the August meeting of the board, held at Tacoma, there were fifteen applicants for certificates of registration, nine of whom passed. The successful applicants were: M. G. Stewart, of Tacoma; J. M. Adams, M.D., of Tacoma; Frank Van Dusen, of Seattle, and Dr. Garner, of Seattle.

Frank Bently, of Seattle; L. P. Dudley,

of Tacoma; N. Kent, of Tacoma; Fred Costigan, of Seattle, and C. A. Buys, of Walla Walla, were passed as assistant pharmacists.

The following were registered by graduation from colleges of pharmacy: N. J. Barford, Seattle, pharmacy department of Royal University, Christina, Norway; J. Ed. Buckley, of Spokane, Philadelphia College of Pharmacy, and C. R. Corey, of Tacoma, pharmacy department Howard University, Washington, D. C.

Licentiatees passed on examinations in other States were: Henry C. Schroder, of Aberdeen; J. H. Lyon, of Roslyn, and George A. Brown, of Seattle.

Following the examination the board elected officers for the ensuing year. A. M. Stewart, of Tacoma, was re-elected president, and W. H. G. Barnes, of Seattle, was re-elected secretary. The next meeting will be held in Spokane on the second Monday of January, 1894.

## Obituary.

JOHN M'KESSON, SR.

The death of John McKesson, Sr., formerly of the well-known firm of McKesson & Robbins, New York, which occurred at his home in this city, on Wednesday, October 11, removes from wholesale drug circles one who was, for nearly half a century, among the most prominent and influential of the men who were his contemporaries in business. Mr. McKesson was born in New York City on February 22, 1807, and when still a lad he went into the drug business as a clerk in the wholesale firm of John M. Bradhurst. In 1833 he started in the wholesale drug trade for himself, and was one of the founders of the firm of Olcott & McKesson. In 1835 Philip Schieffelin was taken into partnership, and the firm was known as Olcott, McKesson & Co. On the retirement of Mr. Schieffelin in 1841, D. C. Robbins was taken into partnership, and in 1853, on the death of Mr. Olcott, the firm name was changed to McKesson & Robbins. Mr. McKesson retired from active business about eight years ago. He was married in 1835 to Miss Maria Lefferts, daughter of Leffert Lefferts of Flatbush, L. I. They had ten children, of whom nine are living. Mrs. McKesson died on March 3, 1893. Mr. McKesson's death was due to exhaustion from a carbuncle.

#### BAD BUSINESS.

(With apologies to the Ghost in "Hamlet.")

'Tis now the very dullest time of year,  
When bare tills yawn, and pharmacists breathe out  
Curses on money's dearth. Now could I pull, hard  
The nose of pert apprentice as he grins [by,  
And gapech idly. Soft! now to my accounts!  
Wholesales! lose not your patience! Let not ever  
A Lord Mayor's summons agitate my bosom.  
Give me but time: except me from your rule.  
I owe six quarters to you—I'll pay one.  
My customers have bills of sale and writs  
In their abodes, and pay not. Ha! a gent!  
Yes sir, what wish ye? Oh! Great Scott! "The  
[vent."  
—C. and D.

Inquisitive Party—"Whose funeral is this?"

Irish Undertaker—"Mine, sor."—*Texas Siftings.*

## With the Advertisers.

### A Mammoth Illustrated Catalogue.

F. Huhn, manufacturer of supplies for the drug trade, of 227 Pearl street, New York, has issued a mammoth catalogue of "prescription supplies," including stationery, lithographed prescription labels, lithographed general labels, lithographed envelopes, lithographed fancy labels, glass specialties, and pill and powder boxes, oblong and slide. Illustrations of the different glassware specialties made by F. Huhn are given on page 8, and the remainder of the list covering 100 pages is given up to examples of prescription labels, druggists' announcements, bill heads, note heads, etc. We understand that a limited number only of these catalogues have been printed. The catalogue contains 108 pages of beautiful examples of the lithographers' art, and should prove fruitful of ideas to the enterprising druggist in search of novelties for any department of the store. The opening pages are taken up with illustrations of pill and powder boxes in different styles of round, square, shouldered and all druggists who desire a copy should make early application, mentioning this paper.

### A Simple Faradic Battery.

The Athos Faradic Battery, which is claimed to be the simplest and most durable battery of its kind, is being placed on the market by Henry Allen, of 138 William street, New York, who is widely known as a dealer in druggists' sundries and glassware. In bringing the merits of this battery to the notice of physicians and druggists, the points are made that it is easily operated, easily kept clean, easily recharged, and with ordinary care will outlast any battery of similar construction. Readers of this journal may obtain a copy of a circular containing full particulars of the new battery on application to the address given above.

### Anæmia.

"Anæmia" is the subject of an article of much literary merit which has been prepared by Dr. W. Thornton Parker, of Groveland, Mass., and published recently in pamphlet form by Billings, Clapp & Co., Boston. It treats of the cure of anæmia with iron, and contains reference to the value of the protoxide of that metal over the sesquioxide and other forms of iron. He makes appropriate mention of the discovery in 1865 by Dr. Nichols, of Boston, of a combination of Peruvian bark with protoxide of iron, and states that in the "Elixir Peruvian Bark with Protoxide of Iron," which Billings, Clapp & Co. put up as a specialty of the firm, "the iron is held in solution by a very feeble chemical affinity, and under the influence of warmth and moisture in the stomach is readily decomposed, and the free protoxide is assimilated at once."

Copies of this interesting pamphlet can be obtained at the expense of a postal card if the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD is mentioned in the application.

### A Nasal Atomizer.

One of the recent additions which the Tyer Rubber Co., of Andover, Mass., have made to their line of atomizers is the "No. 19 Nasal," of which we show the cut. These are made especially for nasal troubles and, like all the "Tyrian" goods,



NO. 19 NASAL ATOMIZER.

are good serviceable articles, at a low price. A new catalogue containing descriptions of the latest novelties has been issued recently by the Tyer Rubber Co., and will be forwarded to any druggist on application.

### Arnold Sterilizers at the Exposition.

Wilmot Castle & Co., Rochester, N. Y., have prepared a neat little souvenir of the Columbian Exposition. It takes the form of a series of illustrations dealing with the exhibition and use of the Arnold Sterilizers at the World's Fair, the series being bound in leaflet form of attractive design. Among the institutions quoted as exhibiting the Arnold sterilizers as part of their technical apparatus are: The United States Army Hospital; the University of Illinois; Emergency Hospital (operating room); Homœopathic Hospital (operating room); Illinois Woman's Hospital; Massachusetts School of Technology, and Massachusetts Board of Health. The Wilmot Castle Co. invite correspondence regarding their manufactures, from druggists, a large number of whom in different parts of the country find the sale of Arnold sterilizers a profitable addition to the other sundries handled.

### A Special Inducement.

During a period of "hard times" such as the present there are offered special inducements to buyers, and those who are wise take advantage of the opportunity. The W. I. Follett Mfg. Co. offer a limited number of the Shaw Numbering Machines for \$6. This is the lowest price ever quoted for a numbering machine. Now is the time to secure one.

### The Production of Condensed Milk.

From the New York Condensed Milk Co. we are in receipt of a handsome and carefully prepared pamphlet dealing with the rise and development of the condensed milk industry in this country. Everyone who is at all interested in this subject should procure a copy, as it contains very large sized engravings in half-tone of the different machinery used in the treatment of the milk, together with copious notes, written in a clear and pleasant style, descriptive of the various processes to which the milk is subjected before being finally inclosed in the tins now so familiar in every household. Any druggist who will forward his business card and mention this paper at the time of writing, may obtain a copy of this handsomely illustrated pamphlet free of cost.

### Papoid Digestion.

Extended study of the reactions of the vegetable ferment, papoid, shows that it is composed essentially of a mixture of vegetable globulin albumoses and peptone, with which is associated the ferments characteristic of the preparation.

Papoid, so far as my observations extend, has the power of digesting to a greater or less extent all forms of proteid or albuminous matter, both coagulated and uncoagulated. Furthermore, papoid is peculiar in that its digestive power is exercised in a neutral, acid and alkaline medium. These statements are amply illustrated. As is well-known 0.2 per cent. solution of salicylic acid is amply strong to act as an efficient antiseptic, preventing the appearance of putrefaction in an organic fluid, even under the most favorable circumstances for its development. Consequently, salicylic acid and papoid might well be combined where application of the ferment to morbid or suppurating growths is desired. Mercuric chloride or corrosive sublimate, when present in a neutral solution of papoid to the extent of 1-1000, does not materially interfere with the proteolytic action of the ferment. This seems somewhat remarkable, and in conjunction with the two preceding experiments makes clear that papoid, as a proteolytic agent is not checked to any extent in its digestive action by carbolic acid, salicylic acid or corrosive sublimate, three of the best known antiseptics.—From Transactions Connecticut Academy.

**Bottle Caps.**

There is nothing enhances the appearance of a bottle containing some liquid compound so much as a neat bottle cap. The plain and colored metal capsules of the John J. Crooke Co., of New York and Chicago, which are advertised in the special issues of this paper, find particular favor among druggists for the purpose indicated. Among other specialties of this firm regarding which full particulars can be obtained on addressing them either at their New York office, 186 Grand street, or at 80 Illinois street, Chicago, are pure tin-foil for drugs, gold tissue foil for wrappers, printed silver surface foil for labels, and plain and colored metal capsules.

**"Tar from Groves of Singing Pines."**

"Tar from groves of singing pines with glycerin and vegetable oil make Packer's Tar Soap." In this manner is Packer's Tar Soap advertised in the illustrated monthlies. Are you prepared for an increased demand for this popular soap?

H. Howard Menn, formerly of the firm of Menn & Stubenrauch, wholesale druggists, 28 Gold street, announces in a circular letter his withdrawal from the firm, and that all debts and liabilities contracted by the firm prior to October 1, will be paid by him.

The Springer Torsion Balance Co. have received notice by wire that they have been awarded a medal for their scales by the judges at the Columbian Exposition, and they naturally feel elated at this very flattering testimonial to the intrinsic merit of their scales and balances.

The exhibit of the J. L. Ellwood Lee Co., manufacturers and exporters of surgical instrument specialties, etc., Conshohocken, Pa., in the Columbian Exposition, is inclosed in a space 17 feet front and 20 feet deep. It was the subject of many favorable commendations from leading surgeons and was especially commented on by the surgeon-general of the German army as well as the surgeon-general from the Russian fleet.

**As to Certain Claims.**

As was to be expected of them, Eissner & Mendelsohn are advertising in numerous out-of-the-way places that "Judge Townsend, 'in a very exhaustive decision,' had declared the name 'Vichy' a commercial name, and as such protected under the industrial property treaty." This is not quite as bad a falsification of court records as was the bogus "decision of German courts" which they rang in on Tarrant & Co., but it is a pretty good starter in that direction. Judge Townsend's decision simply gave the corporation controlling vichy the right of a standing in his court. He has not touched upon the legality of the trademark, nor upon the right of any person to manufacture artificial vichy. Nobody who knows anything of "the ways that are dark and tricks that are vain" of the "sole agents of vichy in America" will be in the least worried about their claims. —*National Druggist.*

**Ridge's Food.**

The makers of this popular brand of infants' and invalids' food, Woolrich & Co., Palmer, Mass., are taking steps to make their product more widely known to the drug trade of the United States. They have prepared a number of show cards of attractive design which they will be pleased to furnish to any druggist sending his business card and mentioning this paper. Woolrich & Co. express themselves as confident that the cards will be appreciated as aids to window decoration and ornaments about the store.

**West Triumph Disinfecter.**

We illustrate herewith a new form of apparatus introduced recently by Robert S. West, of Cleveland, O., and designed for use in the disinfection of inclosed spaces, privies, etc. The "West Triumph Disinfecter," as it is styled by the maker, is particularly well adapted for use in public institutions, hotels, and places of public resort generally, where it is often found impracticable to maintain a free supply of running water.



It is constructed on the siphon principle and can be employed most advantageously in the exhibition of chloro-naphtholeum. Prices and further particulars can be obtained from the maker, Robert S. West, 48 and 50 Long street, Cleveland, O.

**Review of the Wholesale Market.**

NEW YORK, October 18, 1893.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

Trade in drugs, drystuffs and chemicals during the past week has not been of a very extensive character, the general quietude which has been characteristic of the period being attributed to the general holiday taken by prominent representatives of the wholesale drug trade in connection with the annual meeting of the National Wholesale Druggists' Association at Detroit. It is, however, confidently anticipated that the business results of the month will make a good showing as compared with other periods. Values on most staples are firm, and a generally steady feeling appears to prevail. Advances are noted in Balsams, Copaiba and Fir, Alcohol, Celery Seed, Civet, and Small Flake Manna. Among articles which show a decline or are easier in tone are: Ergot, Cassia Buds, Oils Cubebs and Lemon and Mexican Sarsaparilla.

**DRUGS.**

ALCOHOL, grain, has been advanced by the Trust managers to \$2.22 @ \$2.26 as to quantity.

BALSAM COPAIBA has shown a firmer tendency during the interval and sales have been made at a slight advance.

BALSAM FIR, Canada, owing to scarcity has advanced to \$3.25 and is held firmly at the new figure.

BALSAMS PERU AND TOLU are without special change; trade is moderate in a jobbing way.

BARKS.—Buckthorn in a large way has realized 7½c.; we are reported sales of 1,000 lbs. at this figure. Cascara is quiet and unchanged at 6½ @ 7c.; elm is jobbing fairly at 9½ @ 12c.; sassafras 7 @ 8c. and soap 4 @ 4½c.

CAFFEINE, foreign, is yet quoted \$2.25, though for small quantities in the hands of outsiders, \$1.95 @ \$2.05 is quoted as acceptable.

CACAO BUTTER, Dutch bulk, remains quiet, with 33½ @ 34c. representing the range.

CASSIA BUDS are easier, though yet held at 18½ @ 19c.

CIVET of good quality is becoming scarce, and \$3.50 @ \$4 is now required for desirable grades. Inferior goods are obtainable down to \$2.50.

COCA LEAVES continue exceedingly dull, but the market appears well sustained at 12 @ 15c. for Truxillo and 28 @ 32c. for Huanaco.

CUBEBS BERRIES are without quotable change. S. and S. has sold to the extent of 1,000 lbs. at 25c.

ERGOT is given very little attention at the moment. German is nominally quoted 30 @ 32c. and Spanish 36 @ 38c.

LYCOPodium, spot goods, continues very quiet, though nominally unchanged. Forward shipment continues to offer at the equivalent of 48c. laid down.

MANNA, small flake, has advanced owing to scarcity of stock; small sales are making at 45c.

MARJORAM is improving in demand with sales reported of 10 bales sweet at 12½ @ 14c.

MENTHOL, Japanese, continues to reflect a firm market, and \$3.90 @ \$4 is quoted close.

OPIUM has not improved in demand during the week, and as a consequence values have declined and are yet regarded as easy. We are quoted original packages at \$2.57½ @ \$2.60 and jobbing lots at \$2.62½ @ 2.65. Powdered is generally held at \$3.30 @ \$3.35.

QUININE since last report has improved in position, and the distribution into channels of consumption is now moderately active. The quotations for foreign in bulk show an improvement, the range now standing 19½ @ 19¾c. regular, with numerous sales at these figures.

SOAP, Conti, White, is about out of market, and it is difficult to procure quotations. To-arrive purchases can be made at 10¼c., and for more distant shipments down to 9¾c.

VANILLA BEANS are working into strong position, recent sales of cut bringing \$5, and of medium quality, whole, \$7.50.

**DYESTUFFS.**

CUTCH, SM., is in steady moderate request, with the sales at 4¼ @ 5c., as to quantity. In most instances 4½c. is quoted as inside.

**GAMBIR** continues quiet but steady at the current range of 4 @ 4½c. To arrive 3¾c. is asked.

**NUTGALLS**, blue Aleppo, continue in moderate jobbing, inquiry at the quoted range of 14 @ 14½c. for prime quality.

**SUMAC** continues in good demand with the current sales of Sicily at \$70 @ \$75.

#### CHEMICALS.

**ACETATE OF LIME** continues exceedingly dull with 90 @ 95c. quoted for brown and \$1.87½ for gray.

**ARSENIC**, white, continues in small supply, and the market is firm at 3¾c. @ 3½c. as to brand and quantity.

**BLEACHING POWDER** is dull and for the moment neglected. The quotations of the market are 2 @ 2.05c. for German and 2½ @ 2¾c. for English as to quantity.

**BLUE VITRIOL** is steadily maintained at 3¼ @ 3½c., and a moderate business is reported at the range.

**BORAX** continues to reflect a steady market, though the demand does not increase beyond the normal. Refined California held at 8¼ @ 8½c. for crystals and powdered.

**CHLORATE OF POTASH** remains quiet but firm at 14¼c. @ 15c. for German and English respectively.

**CITRIC ACID** continues quiet, without, however, any quotable change in price.

**CREAM TARTAR** is in fair jobbing request at nominally unchanged values.

**NITRATE OF SODA** is very firmly held, \$1.85 @ \$1.90 as to quantity being required.

**OXALIC ACID** is steady and in moderate request at the range of 6½ @ 7¼c.

**SAL SODA**, English, is in limited supply and held firmly at \$1.02 @ \$1.05. Domestic is held and selling at the range of 97½ @ \$1.

#### ESSENTIAL OILS.

**ANISE** continues held at the previous range of \$1.37½ @ \$1.40.

**CAJUPUT** and **CAPRIVI** are steady in price but the distribution is of limited proportion.

**CASSIA** is meeting with a moderate sale at 75 @ 80c.

**CUBEB** is dull though the market continues firm at \$2.

**CLOVE** continues held at \$2¼ @ 55c., but there is an absence of important demand, and the distribution is light.

**ERIGERON** is in better supply and is now offered freely at the quoted range of \$1.40 @ \$1.50.

**LEMON** has declined and best brands can now be purchased at \$2.

**NUTMEG** is slightly easier, \$1.80 being now quoted as acceptable.

**PENNYROYAL** offers freely at \$1.10 @ \$1.15 though the trade requirements momentarily are very limited.

**PEPPERMINT** appears to be in good consuming demand, and export orders for HGH are said to be plentiful, though some difficulty is experienced in reconciling the views of prospective buyers and sellers, the former offering \$2.40 and the latter asking from \$2.47 @ \$2.50. Bulk is maintained steadily at \$2.15 @ \$2.20 for Western and \$2.30 @ \$2.35 for Wayne County.

**SASSAFRAS** is inquired for and occasional sales are making at 35 @ 38c. as to quality and quantity.

**WINTERGREEN** is quiet, and with supplies offering freely, the market is regarded as easy at \$1.55 @ \$1.65 for pure as to holder, and 95c. for artificial.

#### GUMS.

**ALOES**, Curacao, has been in demand during the week and we are reported sales in monkey skins aggregating 1,000 pounds at 3c.

**ASAFETIDA** of the choicer grades are in small supply and held in strong position.

**BENZONIN** has been inquired for to some extent and we are reported a sale of 1,000 lbs. at 30c.

**CHICLE** continues inquired for, but buyers' limits are yet below those of importers. The latter continue to quote 24c.

**CAMPHOR** is firmly maintained at the quoted range of 45c. for barrels and 46c. for cases.

**SENEGAL** shows no action of any consequence; prices are nominal.

**SHELLAC** is in slightly better demand, though there is yet an absence of much interest of a speculative character. Prices are maintained steadily as a rule. DC is quoted 34 and VSO 30.

**TRAGACANTH** is inactive with the market showing an easier tendency.

#### ROOTS.

**GOLDEN SEAL** is more actively inquired for and the tone of the market is stronger, 20½ @ 21c. now quoted as the general asking price.

**IPECAC** continues dull with the tone of the market easy. We quote the range at \$1.18 @ \$1.20.

**ORRIS**, Florentine, offers more freely, though the quotations of the market remain unchanged.

**RHUBARB** is easier with the quoted range 25 @ 60c. for ordinary to fine quality.

**SARSAPARILLA**, Mexican, in a jobbing way is selling at 9¼c.

**SENEGA** is held with increased firmness owing to the fact that no additional is at present offered from the West. Best grades continue to be quoted 37 @ 38c., while ordinary are held at 35c.

**SERPENTARIA** is exceedingly scarce, and 22c. is now regarded as an inside price.

#### SEEDS.

**ANISE**, Italian, has advanced at primary sources to the equivalent of 10½c. laid down. Up to 11c. is now quoted in this market.

**CANARY** continues to offer at 2 @ 2¼c. for Smyrna.

**CARDAMOM** are quiet and a trifle easier. Allepy quoted at 50 @ 70c.; Malabar at 70 @ 85c., and Mangalore at 55c. @ \$1.30, with, however, a limited inquiry.

**CELERY** continues to improve in price owing to the scarcity; 14 @ 14½c. is now quoted regular.

**CORIANDER** has been in active request and we note numerous small sales of unbleached at 3½ @ 4¾c. Bleached is held at 4¼ @ 5c.

**HEMP**, Russian, is well sustained at 3¼ @ 3½c., though distant arrivals of new crop may be obtained at 2¾c.

## Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted free of charge. Write distinctly, on one side of paper only, and do not use postal cards.*

#### POSITIONS VACANT.

**WANTED**—A good salesman visiting the drug trade to sell our wines and brandies as a side line. Glen Wine Co. (Limited), Hammondsport, N. Y.

#### POSITIONS WANTED.

**PHARMACIST'S RELIEF**—For evening and Sunday relief work. J. Maxwell MacDonald, 339 Dean street, Brooklyn.

**WANTED**—A situation by a young man of 3 years' experience; 21 years old; can furnish first class reference; Indiana preferred. Address "Opium," at this office.

**JUNIOR DRUG CLERK**, two years' experience, desires a permanent position in New York or Connecticut; good habits; sleep in store if desired; small wages. Address: G. J. Evans, Box 17, Burrville, Litchfield Co., N. Y.

**LADY** graduate, experienced, wishes position in drug store or dispensary, city or country; A1 reference. Address "Pharmacist," at this office.

**SITUATION** wanted as distributing advertising agent; would prefer the New England States; have had 4 years' experience in the drug business; best reference, including present employer. Address, giving salary, "Mucilage Acacia," care 46 Bank street, Waterbury, Conn.

**POSITION WANTED** by young man 26 years old, as manager or clerk; New York State license; best of reference; eight years' experience. Address "Sotol," at this office.

**YOUNG** man twenty-four years of age; graduate of N. Y. C. P.; eight years' practical experience in the retail drug business; registered in New York, New Jersey and Brooklyn; will be open for engagement after Oct 18th; best of references. Address "Loophan," at this office.

**SITUATION WANTED** by young man 22 years of age; 10 years' experience; licensed in New York State; can furnish the best of references; South preferred. Address "Cassia," at this office.

**YOUNG** MAN, 21 years of age, wishes permanent position with good reliable druggist; four years' practical experience; also can fill prescriptions salary moderate. Address Charles C. Dailey, Box 74, Harper's Ferry, W. Va.

**DRUGGIST** of 20 years' experience desires to represent first-class houses as distributing advertising agent for Southern California; also call on trade if desired; large acquaintance with physicians and the drug trade; best of references; correspondence solicited. Address "Traveling Salesman," Room 12, 107 N. Spring street, Los Angeles, Cal.

#### BUSINESS OPPORTUNITIES.

**WANTED**—To buy, half interest in good paying drug store in Texas. Address, at once, W. LaRine, Athens, Texas.

**DRUG STORE** for sale; net profits \$1,800 per year; cheap rent; long lease; must sell at once; going out of business; will take \$1,500 cash; rare bargain. Come and see store, 387 Grand street, Jersey City.

**DRUG STORE WANTED**—I want to buy a drug store in good town. Address "Bromo," care AMERICAN DRUGGIST, 37 College place, New York City.

**FOR SALE**—Fine set of drug fixtures (oak), consisting of shelving, drawers, R. desk, show cases, shelf bottles, etc.; they are in good condition having only been used short time, designed for room 18 x 40; will sell very cheap. Siegfried & Co., Warren, Pa.

**OLD** ESTABLISHED drug store to rent, repainted and stocked; new "soda" apparatus (no cutting); Hudson River town; opening for a live man, on main street. "F. A. G.," 236 Liberty street, Newburgh, N. Y.

**FOR SALE**—At a bargain, a little gem of a drug store, fresh stock, in center of a wealthy farming country 10 miles from any doctor or drug store, an unusually good opening for both; business will invoice about \$600. Address J. W. Warner, M. D., Bonfield, Illinois.

Several letters await "Aplol" at this office.

**Clerks and Employers should call at this office, register their wants and examine our list of POSITIONS WANTED POSITIONS VACANT and BUSINESS OPPORTUNITIES, which can be consulted free of charge.**

# ORIGINAL PACKAGE PRICES.

It should be understood that the prices quoted in this column are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a considerable range of prices.

| Drugs, Chemicals, &c.        |       |       | Nux Vomica, lb.              |       |       | Cardamon, Malabar,          |       |       |
|------------------------------|-------|-------|------------------------------|-------|-------|-----------------------------|-------|-------|
| Acetanilid, bulk, per lb.    | .35   | .36   | per lb.                      | .03   | .04   | per lb.                     | .75   | .85   |
| " lb., per lb.               | .01   | .02   | Nutgalla, China, per lb.     | .13   | .13   | Colchicum, lb.              | .12   | .14   |
| " oz., per oz.               | .01   | .02   | Aleppo, per lb.              | .14   | .14   | Coriander, lb.              | .04   | .04   |
| Acetate of lime:             |       |       | Oils, Essential:             |       |       | Cummin, lb.                 | .11   | .12   |
| Brown, per 100 lb.           | .90   | .95   | Anise, .....                 | 1.35  | 1.40  | Fennel, Germ., lb.          | .11   | .12   |
| Gray, per lb.                | .01   | .02   | Almonds, Bitter, .....       | 7.50  | 7.50  | Flax Meal, per lb.          | .01   | .02   |
| Acids:                       |       |       | " Sweet, .....               | .40   | .43   | Poenugreek, lb.             | .01   | .02   |
| Acetic Com'l, .....          | .01   | .02   | Bay, per lb.                 | 3.50  | 3.75  | Hemp, Russian, lb.          | .01   | .02   |
| Aqua fortis, 36 deg.         | .03   | .03   | Cajeput, Native, .....       | .45   | .55   | Mustard, yel. Cal. lb.      | .04   | .05   |
| " 40 deg.                    | .04   | .04   | Cassa, .....                 | .75   | .80   | Mustard, brown, Cal.        | .04   | .05   |
| Benzoin, German, .....       | .47   | .54   | Citronella, Native, .....    | .75   | .80   | Poppy, per lb.              | .03   | .04   |
| " English, .....             | .47   | .54   | Clove, .....                 | .55   | .55   | Quince, German, lb.         | .07   | .07   |
| Boric, Whole, .....          | .13   | .14   | Copaiba, .....               | .75   | .75   | Rape, German, lb.           | .03   | .04   |
| " Powdered, .....            | .13   | .14   | Croton, .....                | .75   | .75   | Rape, English, lb.          | .03   | .04   |
| Citric, American, .....      | .45   | .46   | Cubeb, .....                 | 2.00  | 2.10  | Soap, Castile, Mars,        | .06   | .06   |
| " English, .....             | .45   | .46   | Erigeron, per lb.            | 1.45  | 1.50  | mottled, pure, lb.          | .06   | .06   |
| Carbolic Crystals, .....     | .13   | .17   | Geranium Chiriz, .....       | 4.20  | 7.50  | White, lb.                  | .09   | .10   |
| bulk, .....                  | .13   | .17   | Lavender, .....              | 1.80  | 1.85  | Soda Ash, lb., 48% per      | 1.30  | 1.80  |
| lb. bottle, .....            | .80   | .81   | " Garden, .....              | .40   | .90   | 100 lb.                     | 1.30  | 1.80  |
| Muriatic, 18.25 deg.         | .90   | 1.37  | Lemon, as to brand, .....    | 1.35  | 2.00  | Squills, white, lb.         | .04   | .06   |
| Nitric, 38 degrees, .....    | .03   | .04   | Lemongrass, .....            | .75   | .75   | Sugar Milk, powd., lb.      | .11   | .14   |
| " 40, .....                  | .04   | .04   | Musk, per lb.                | 7.00  | 8.00  | Sugar Lead, white, lb.      | .11   | .14   |
| Oxalic, English, .....       | .06   | .06   | Myrrane, .....               | .17   | .19   | " Lead, brown, lb.          | .05   | .06   |
| " German, .....              | .06   | .06   | Neroli, .....                | 22.00 | 22.00 | Sulphate Ammonia, per       | 2.90  | 3.00  |
| Picric, .....                | .26   | .26   | Nutmeg, .....                | 1.75  | 2.75  | 100 lb.                     | 2.90  | 3.00  |
| Salicylic, .....             | 1.00  | 1.22  | Orange, .....                | 1.50  | 1.65  | Do. Potash, 48% per         | 1.11  | 1.15  |
| Sulphuric, .....             | .80   | 1.00  | Origanum, .....              | .24   | .24   | lb.                         | 1.11  | 1.15  |
| Tartaric, Crystals, .....    | .22   | .23   | Pennyroyal, .....            | 1.15  | 1.20  | Do., Potash, 90% per        | 2.20  | 2.25  |
| " Powdered, .....            | .23   | .24   | Peppermint, bulk, .....      | 2.20  | 2.40  | lb.                         | 2.20  | 2.25  |
| Tannic, .....                | 1.05  | 1.20  | " GHG, .....                 | 2.50  | 2.65  | Sulphur, Roll, .....        | .01   | .01   |
| Alcohol, Grain, per gal.     | 2.22  | 2.26  | Rose, .....                  | 7.50  | 8.00  | " Flour, .....              | .01   | .01   |
| (Less rebate), .....         |       |       | Sandalwood, .....            | .85   | .85   | Spirits Nitre, U. S. P.,    | .39   | .40   |
| Wood, 95/97, .....           | 1.00  | 1.05  | Sassafras, .....             | .35   | .38   | Spirit Ammonia, Arom.       | .44   | .45   |
| Alcoholene, .....            | .10   | .10   | Sassafras, Artificial, ..... | .28   | .30   | Sulphuric Ether, .....      | .54   | .61   |
| Alum, Lump, per 100 lb.      | 1.75  | 1.85  | Spearmint, .....             | 1.60  | 1.90  | Sumac, Sicily, ton, .....   | 72.50 | 77.00 |
| Ground, per 100 lb.          | 1.85  | 1.85  | Tansy, .....                 | 2.00  | 3.00  | " Virginia, .....           | 43.00 | 47.50 |
| Antifebrine, per oz.         | .10   | .20   | Wintergreen, .....           | 1.55  | 1.60  | Tar Barbadoes, gal., .....  | .45   | .45   |
| Antipyrine, per oz.          | 1.20  | 1.40  | " Artificial, .....          | .95   | .95   | Tin Crystals, bbl., per     | .15   | .15   |
| Arrow root, Berm., lb.       | .24   | .25   | Wormwood, .....              | 2.25  | 2.25  | lb.                         | .15   | .15   |
| St. Vincent, in bbl., lb.    | .11   | .11   | " GHG, .....                 | 3.75  | 3.75  | Jars, per lb., .....        | .17   | .17   |
| Arsenic:                     |       |       | Opium, Natur'l, ca, per      | 2.57  | 2.60  | Tonka Beans, Angost.,       | 1.75  | 2.00  |
| Red Saxon, lb., .....        | .05   | .06   | lb.                          | 2.57  | 2.60  | lb.                         | 1.75  | 2.00  |
| White, .....                 | .05   | .06   | Opium, Ordinary, .....       | 2.65  | 2.65  | Tonka Beans, Para, lb.      | .55   | .65   |
| Balsam, Copaiba, lb., .....  | .30   | .35   | Jobbing, per lb., .....      | 2.65  | 2.65  | " Surinam, .....            | .75   | .75   |
| Fir, Canada, gal., .....     | 3.25  | 3.25  | Opium, Powd., per lb.        | 3.30  | 3.35  | Turpentine, Spirits, .....  | .20   | .30   |
| Fir, Oregon, gal., .....     | .75   | .80   | Phenacetine, per oz., .....  | .85   | .90   | Vanilla Beans, lb., .....   | 6.00  | 11.00 |
| Pern, lb., .....             | 1.35  | 1.40  | Prunella Potash, Yel-        | .21   | .22   | " cut, lb., .....           | 4.50  | 5.25  |
| Tolu, lb., .....             | .23   | .25   | low, per lb., .....          | .39   | .42   | Venice Turpentine, bar-     | .18   | .19   |
| Bark, Buckthorn, per lb.     | .10   | .10   | Red, per lb., .....          | .39   | .42   | rels, lb., .....            | .18   | .19   |
| Cascara Sagrada, lb., .....  | .07   | .08   | Quicklyyer, flasks, per      | .52   | .54   | Cans, lb., .....            | .10   | .10   |
| Elm, lb., .....              | .10   | .12   | lb., .....                   | .52   | .54   | Wax, Brazil, Veg., lb.,     | .09   | .17   |
| Orange peel, .....           | .06   | .07   | Quinine:                     |       |       | Japan, lb., .....           | .08   | .08   |
| Sassafras, per lb., .....    | .08   | .08   | Domestic, bulk, oz., .....   | .20   | .23   | Animal and Vegetable Oils.  |       |       |
| Soap, lb., .....             | .03   | .04   | Domestic, oz., .....         | .20   | .23   | Linseed, City, raw, gal.    | .40   | .40   |
| Bicarb. Soda, Engl., lb.     | .03   | .03   | German, bulk, .....          | .10   | .10   | Linseed, City, boiled,      | .40   | .40   |
| domestic, lb., .....         | .03   | .03   | German, oz., .....           | .27   | .27   | gal., .....                 | .40   | .40   |
| Bichromate, Pot'h, lb.       | .10   | .11   | Roots, Aconite, lb., .....   | .09   | .14   | Linseed, Western, raw,      | .40   | .40   |
| Bismuth, Sub. Nit.,          | 1.95  | 2.00  | Althea, cut, lb., .....      | .15   | .18   | gal., .....                 | .40   | .40   |
| per lb., bulk, .....         | 1.95  | 2.00  | Alkanet, lb., .....          | .06   | .07   | Lard, City, Ex. Winter,     | .40   | .40   |
| Bismuth, Sub. Carb.,         | 2.25  | 2.30  | Arnica, lb., .....           | .12   | .13   | gal., .....                 | .40   | .40   |
| per lb., bulk, .....         | 2.25  | 2.30  | Beladonna Ger., lb., .....   | .08   | .12   | Lard, City, Prime, pres-    | .64   | .65   |
| Bleach'g Powd., per lb.      | .04   | .03   | Blood, lb., .....            | .05   | .06   | ent make, gal., .....       | .64   | .65   |
| Blue Vitriol, lb., .....     | .03   | .03   | Calamus, lb., .....          | .07   | .08   | Lard, City, Extra No.       | .55   | .65   |
| Borax, refined, lb., .....   | .08   | .08   | Calamus, blanc'd, lb.,       | .21   | .24   | 1, gal., .....              | .55   | .65   |
| Concentrated, lb., .....     | .07   | .08   | Colchicum, per lb., .....    | .11   | .14   | Lard, City, No. 2, gal.,    | .50   | .55   |
| Brimstone, best ad, ton      | 19.00 | 19.50 | Colombo, lb., .....          | .06   | .11   | " West, prime, gal.,        | .75   | .75   |
| Bromide Potash, Do-          |       |       | Dandelion, Germ. lb.,        | .07   | .08   | Cotton-seed, C r u d e,     | .31   | .33   |
| mestic, b'l, lb., .....      | .35   | .36   | Dogwood, lb., .....          | .08   | .10   | grades, gal., .....         | .31   | .33   |
| bottles, lb., .....          | .39   | .40   | Galangal, lb., .....         | .04   | .04   | Cotton-seed, Summer         | .38   | .39   |
| Bromide Ammonium,            |       |       | Gentian, lb., .....          | .03   | .04   | Yellow, prime, gal.,        | .38   | .39   |
| bulk, .....                  | .43   | .44   | Ginseng, lb., .....          | 2.25  | 3.00  | Cotton-seed, Summer         | .36   | .37   |
| Bromide Sodium, b'l.,        | .40   | .41   | Ginger, Jamaica,             | .16   | .17   | Yellow, off grades, .....   | .36   | .37   |
| Bromine, bulk, .....         | .43   | .47   | blcd., lb., .....            | .15   | .17   | Cotton-seed, Winter         | .42   | .44   |
| Burgundy pitch, per lb.      | .08   | .08   | unblcd., lb., .....          | .15   | .17   | Yellow, gal., .....         | .42   | .44   |
| Cacao Butter:                |       |       | Golden Seal, lb., .....      | .20   | .21   | Cotton seed, Winter         | .42   | .44   |
| 12-lb. boxes, lb., .....     | .30   | .31   | Hellebore, powd., lb.,       | .07   | .10   | White, gal., .....          | .46   | .46   |
| Dutch A., per lb., .....     | .32   | .34   | Ipecac, lb., .....           | 1.18  | 1.20  | Sperm, Crude, gal., .....   | .70   | .70   |
| Caffeine, .....              | 1.90  | 2.25  | Jalap, lb., .....            | .28   | .30   | Sperm, Natural Spring       | .75   | .77   |
| Camphor, ref'd, bbls., lb.   | .45   | .46   | Kava Kava, lb., .....        | .30   | .30   | gal., .....                 | .75   | .77   |
| cases, lb., .....            | .48   | .50   | Licorice, select, lb.,       | .08   | .12   | Sperm, Bleached Spring      | .80   | .80   |
| Cantharides, Chinese, lb.    | .28   | .30   | " P w'd., lb., .....         | .05   | .12   | gal., .....                 | .80   | .80   |
| Russian, lb., .....          | .70   | .75   | Lovage, lb., .....           | .50   | .55   | Sperm, Natural Win-         | .85   | .87   |
| Carb. Ammonia,               |       |       | Mandrake, lb., .....         | .03   | .04   | ter, gal., .....            | .86   | .88   |
| cases, lb., .....            | .08   | .09   | Orris, Florentine, lb.,      | .25   | .35   | Whale, Crude, gal., .....   | .40   | .40   |
| Cassa Bude, lb., .....       | .18   | .19   | Orris, Verona, .....         | .12   | .14   | Whale, Natural Win-         | .47   | .48   |
| Castor Oil, cases, lb.,      | .15   | .15   | Pink, lb., .....             | .22   | .25   | ter, gal., .....            | .47   | .48   |
| Barrels, lb., .....          | .14   | .15   | Rhubarb, whole, lb.,         | .25   | .60   | Whale, Ex. Bl'ch'd, gal.    | .53   | .53   |
| Caustic Soda, 70%, 100 lb.   | 2.70  | 2.85  | Sarsaparilla, Hond. lb.      | .28   | .40   | Sound, gal., .....          | .33   | .33   |
| Caustic Soda, 60%, 100 lb.   | 2.90  | 3.10  | Sarsaparilla, Mex. lb.,      | .09   | .10   | Dark, pressed, gal., .....  | .36   | .36   |
| Chalk, Engl. Precip.,        |       |       | Senega, lb., .....           | .35   | .38   | Light, pressed, gal.,       | .38   | .38   |
| bulk, lb., .....             | .04   | .06   | Serpentaria, lb., .....      | .20   | .22   | Bleached, Winter, gal.      | .41   | .41   |
| Chloral Hydrate Crys-        |       |       | Valerian, Belgian, lb.,      | .07   | .07   | Extra Bleached, gal.,       | .44   | .44   |
| tals, bulk, per lb.,         | .95   | 1.05  | " German, lb., .....         | .10   | .12   | Tallow, City, prime, gal.   | .50   | .56   |
| Hydrate crusts, bulk,        |       |       | Saffron, Amn., lb., .....    | .30   | .32   | Western, prime, gal.,       | .50   | .56   |
| per lb., .....               | .08   | 1.00  | Spanish, Valencia, lb.       | 6.50  | 7.00  | Cocoonut, Ceylon, lb.,      | .05   | .05   |
| Chlorate Pot. Cry., lb.      | .14   | .15   | Spanish, Alicante, lb.       | 5.00  | 5.50  | Cochin, lb., .....          | .06   | .06   |
| Pow'd, lb., .....            | .15   | .15   | Sai Ammoniac, lump, lb.      | .08   | .09   | Cod, Domestic, gal., .....  | .38   | .40   |
| Chloroform, Bulk, lb.,       | .50   | .51   | Do., Granulated, lb.,        | .05   | .05   | Foreign, gal., .....        | .42   | .45   |
| Chlorchloride, Sulphate      |       |       | Sai Soda, Eng., 100 lb.,     | 1.02  | 1.05  | Red Elaine, gal., .....     | .44   | .45   |
| of German, oz., .....        | .02   | .02   | " American, .....            | .90   | .95   | Red Saponified, lb.,        | .05   | .05   |
| Citrate, U. S. P., Iron, lb. | .50   | .50   | Salt peter, crude, per lb.   | .04   | .05   | Bank, gal., .....           | .40   | .41   |
| Soluble, .....               | .55   | .55   | lb., .....                   | .06   | .08   | Strata, gal., .....         | .41   | .42   |
| Iron and Ammonia, lb.,       | .50   | .50   | Seeds, Anise, Ital. lb.,     | .06   | .11   | Olive oil for table in time | 1.30  | 1.35  |
| Iron and quinine, .....      | 1.50  | 1.55  | Anise, Star, lb., .....      | .22   | .23   | Olive, Com'n, bbls, gal.    | .58   | .60   |
| Iron and strychnine, .....   | 2.00  | 2.05  | Canary, Smyrna, lb.,         | .13   | .14   | Neatsfoot, prime, gal.,     | .65   | .65   |
| Phosphate, U. S. P., lb.     | .57   | .57   | Canary, Sicily, lb., .....   | .00   | .04   | Palm, prime, Lagos, lb.,    | .05   | .06   |
| Pyrophos, Sol., lb., .....   | .55   | .55   | Caraway, lb., .....          | .07   | .07   |                             |       |       |
| Pyrophos, Soluble, lb.,      | .55   | .55   | Cardamon, Aleppo, .....      | .65   | .75   |                             |       |       |
| Potash, per lb., .....       | .49   | .49   | per lb., .....               | .14   | .14   |                             |       |       |
| Soda, per lb., .....         | .49   | .49   |                              |       |       |                             |       |       |
| Cobalt, pow'd, lb., .....    | .10   | .10   |                              |       |       |                             |       |       |
| Cocaine Muriate, per oz.     | 5.15  | 6.00  |                              |       |       |                             |       |       |
| Codine, bulk, oz., .....     | 4.15  | 4.15  |                              |       |       |                             |       |       |

# American Druggist and Pharmaceutical Record.

A JOURNAL OF PRACTICAL PHARMACY.

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## AMERICAN DRUGGIST PUBLISHING COMPANY.

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A. R. ELLIOTT, PRESIDENT.

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The "American Druggist and Pharmaceutical Record" is issued on Thursday of each week. Changes of advertisements and all copy for publication should be received before Tuesday of each week.

We are not responsible for any money paid to agents. All remittances should be made direct to this office. Express Orders, Post-Office Orders and Drafts on New York should be made payable to the "American Druggist Publishing Company" and addressed to them at 37 College Place, New York.

*Liberal Commissions to Club Agents.*

DO not despise small things. A few nicely arranged, seasonable specialties exposed on the show case or the counter sell themselves if marked in plain figures. Care must be taken, however, not to overdo it. It is better to have a few things of this kind prominently displayed and changed once or twice a week than to have a wilderness of them standing unchanged from month to month.

"WELL bought is half sold," is an old proverb whose point gains keenness in these times of stress. Do you buy well? Do you note the changes as reported in our market review from week to week? Do you consider the season, and bearing in mind your future needs, keep a close watch for a chance to buy closely? If not you do not appreciate to the full the value which this paper may be to you.

A FLUSHING druggist (by which is meant a druggist of Flushing) has put to good and novel use some of the illustrations published in our series of "Tips on Advertising." Being something of an artist he has reproduced some of the more striking of these illustrations in enlarged form and utilized them as a basis for a series of window show cards. It is with pleasure that we also note many other instances where good results have followed from the awakening of the druggist to the fact that he has not heretofore been making that intelligent use of his advertising opportunities which he might and should. It does not suffice at this day and time to merely have a good thing to sell. It is necessary to impress this fact

upon the public, and our "Tips on Advertising" furnish many practical ideas on how best to do this.

## PHARMACISTS AS ANALYSTS.

THE Seventh International Pharmaceutical Congress passed a resolution concerning the pharmacist as an analyst as follows:

*Resolved*, That in the judgment of this Congress, the educated pharmacist is the natural and proper expert on measures for public tests, not only in prevention of adulteration but in the inspection of water supplies, of sewage, etc. The pharmacist is, by virtue of his profession, the common chemist of the common people.

This resolution may claim attention as an aspiration rather than as an asseveration. It voices the sentiment rather than the situation of the pharmacist.

In the Austrian Diet last Spring the question of making the pharmacist the official analyst received very serious consideration, and though the bill making this change failed of passage, the mere fact that such a measure was seriously debated and received a very respectable support augurs well for the growth of a sentiment in this direction.

It may be of interest to note the pros and cons of the question as they were elicited in the debate in the Austrian legislature, for in some part at least the same arguments would apply to a similar proposal in any other country.

It was argued in favor of the measure that it was desirable to have official analysts so located as to be easy of access in all parts of the empire; that the amount of work to be done in the more thinly populated districts would not warrant the government in establishing a laboratory and keeping a trained expert at hand, and that, this being impracticable, the residents of such sections would be deprived of service to which they were entitled, equally with the urban population, unless some other provision were made.

Under these circumstances it was urged that recourse would naturally be had to the pharmacist who had all or nearly all the appliances and the qualifications required to fill the post of public analyst.

It was admitted that the curriculum of the pharmacist as now laid down (in Austria this is prescribed by the general government) fell short of supplying all the requirements called for if the pharmacist is also to be the analyst, but these shortcomings, it was stated, could be very readily supplied and that too without lengthening the time of attendance on the University.

Many of the pharmacists had by post-graduate

studies already qualified for the performance of the duties of the analyst or at least for such of those duties as he would be required to perform in the rural districts where alone pharmacists were to be appointed, and that by a careful selection well qualified men could be found in almost every locality where it was deemed necessary to have an analyst located.

It was also stated that the public already considered the pharmacist as in some sort a sanitary expert, frequently consulting him informally on matters of sanitation and hygiene, and that by giving the pharmacist official recognition by appointment as a government analyst he would command a place in the public esteem more in accord with that which his qualifications deserved than was now accorded him.

The arguments of the opposition consisted of a denial of the qualifications of the pharmacist, and of a statement that, even if qualified, the commercial nature of the pharmacist's calling would effectually preclude his ever acting as public analyst, because if in the discharging of his official duties it became necessary for him to condemn the wares of a baker, for instance, he would thereby incur the enmity of that particular baker, possibly to the serious detriment of his business. Under these circumstances, said the opponents of the measure, it would be too much to expect of human nature that the pharmacist-analyst would not on occasion strain a point when called upon to make an analysis the results of which involved the business interests of some friend and patron.

For our country it may be said that while the contentions of the opponents of the measure are to a large extent true, the arguments in favor of the measure lose somewhat of their force mainly because of the lower standards of educational qualifications as set up by our licensing power the State Board of Pharmacy.

Therefore we may for the present at least look upon the resolution in question as an aspiration toward what should be rather than an asseveration of what is.

The young pharmacist now qualifying should bear this in mind, however, for at our present rate of progress it will not be a great while before this aspiration may be generally realized as it now is in a few isolated cases.

#### OCTOBER DAYS.

THESE half-way days are not good for the soda-water trade. The thirst-producing heat of Summer is past, and the bracing October weather is not cold enough to suggest hot soda. But Winter comes on apace (whatever that may mean), when hot chocolate, hot coffee, hot clam bouillon, and hot beef tea will have their day. Are you ready for those days? Have you something that goes just to the right spot in the anatomy of your customers?

We give elsewhere in this issue several formulas which have proven to be money makers. Get yourself a hot soda fountain and try some of these. The returns are large for the amount invested where the location is favorable, and where the business is pushed.

Push! That is the word that's on the front gate, the main entrance, and the inner door to the temple of success. It is an invaluable quality.

Push, and keep at it.

In a Southern drug store, where a miscellaneous stock was kept, were two young clerks who had that quality. Each selected some one article to push, and made it a point to sell one of these articles whenever it was possible. It mattered not what brought the customer into the store. When John had supplied his known wants he sprung a lantern on him, if he thought there was the barest possibility of selling one. In this way a gross of lanterns was worked off within a few weeks.

Ben pursued the same tactics with hair brushes, and with an equally gratifying result. Some other special item was then taken up. The business prospered, and now these two clerks who pushed are proprietors of the most successful drug store in their section.

And observe, they Specialized.

This is an age of specialization, in business as in science. Specialized effort, if rightly directed, is the most successful. Specialize in your effort to sell sundries and encourage your clerks to do so.

The result of a given amount of effort will almost invariably be better, and will always be more quickly perceptible when that effort is specialized,

Therefore Push and Specialize.

#### THE NEW PHARMACOPŒIA

##### II.

AS was to be expected, the Seventh Decennial Revision of the United States Pharmacopœia is receiving the criticism, both adverse and favorable, which appears to be the necessary concomitant of all new publications. In a review which is marked by many evidences of painstaking care, though evidently prepared with some degree of haste, GEORGE M. BERINGER, A.M., Ph.G., who announces himself "a practical pharmacist," or at least offers his observations as viewed from "the standpoint of a practical pharmacist," is disposed to find fault with the work on the ground that it is too scientific in character. He seems to see in its pages "evidence of the want of that practical knowledge of the pharmacy of to-day acquired only by personal contact with customers," and concludes with regard to the errors which have been overlooked by the committee of revision, that "the work is far from perfect." Now we hold that such a manifest disposition to find fault displayed in the opening paragraphs of a review appearing in the *American Journal of Pharmacy* is just a little indicative of bias, and cannot but suggest the captious critic. The typography of the work, which has been universally admitted to be beyond compare in works of its kind, and which has elicited unstinted praise from one so well qualified to judge as MARC BOYMOND, editor of the *Paris Repertoire de Pharmacie*, is dismissed as "fair." If the committee of revision will be guided by Mr. BERINGER, future editions of the pharmacopœia will appear without the history

of past conventions, and the work contain ten pages less of historical matter. This suggestion is worthy of consideration, but the one which follows advising the elimination of part of the tabular statements relative to calculations and testings will meet with small support, since the reason given, namely, that the tables referred to "will appear in the dispensatories and various compends," is very weak.

Its weakness will be apparent when the fact is brought to mind that the makeup and general character of the dispensatories and compends is dependent in a great measure upon the pharmacopœia itself. The writer makes a strong point when he asks for an *official table of doses*; this, we admit, is a want which, though heretofore not supplied by the committee of revision, is, nevertheless, felt by medical men and pharmacists, and is regarded in many quarters as a real need. The error regarding the strength of infusions and decoctions, to which attention was directed in one of the August issues of the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD, is duly mentioned by Mr. BERINGER. The new figures for the weight of a fluid ounce of water does not find favor from the fact that the weight is recorded at maximum density in vacuo, pharmacists never conducting their operations in vacuo and "rarely at the temperature of maximum density." As the weight of a fluid ounce of water is uniform at 455.7 grains at ordinary temperature, and 456.392 grains at maximum density in vacuo, always bearing this relative proportion, we fail to see how the new figures and the method of obtaining them is to interfere with the practical operations of the pharmacist. If he is unable from the lack of proper instruments to conduct his operations in strict accordance with the official standard, in this respect, no harm will be done providing he bases all of his calculations on the old figures. The plea in favor of dismissing all figures relating to the Fahrenheit scale and the old system of weights and measures is commendable, and in line with what we have always advocated—namely, the adoption of the new system *in toto* and entire doing away with the clumsy expedient of transposing the different values. When persons using the metrical system of weights and measures train themselves to think exclusively in that system in conducting the operations of weighing and measuring, a thorough understanding of its workings will follow as a matter of course.

The assay processes for cinchona and opium and for preparations of opium and nux vomica receive fitting and favorable mention; the modified Squibb process for the assay of opium being particularly commented upon. Regarding the last mentioned, in which the water-washed crystals of morphine are directed to be washed with alcohol saturated with morphine prior to final treatment with ether, it is deemed advisable to caution the operator against allowing any evaporation of alcohol to take place, since, were this to happen, it is obvious that a slight error would be introduced.

\* In presenting his views of the new pharmacopœia, Mr. BERINGER has allowed no error however trivial to

escape his observation. Thus he notes with particular care the neglect of the committee of revision to specify distinctly in the official process for the assay of extract of nux vomica the use of *distilled* water in conducting the determination of total alkaloid present. But what kind of a pharmaceutical chemist is he who would attempt any delicate alkaloidal determination, in which water played a part, without the use of water which had been freshly distilled? However, there is some reason for the objection; and the precision of the committee will undoubtedly be well pleased to receive this evidence of the appreciation of a practical pharmacist for extreme precision in pharmacopœial directions.

Regarding the vegetable drugs dismissed from the pharmacopœia, Mr. BERINGER agrees that "none were sufficiently used to be retained," and is of opinion that cascarilla, chelidonium, illicium, melissa, and sabina should also have been excused, as they would not be missed. We must admit it is a little surprising that such obsolete remedies as these referred to should find place in so modern a work as the Seventh Edition of the U. S. Pharmacopœia, but an explanation for their retention may be found in the fact that each of the drugs mentioned are yet regarded as useful in different parts of the country. The exclusion of caulophyllum, inula, marrubium, staphisagria, pulsatilla, and toxicodendron is thought to be in order for the reason that no official preparations of these drugs are recognized, and from the fact as well that they are never prescribed in the crude state.

Mr. BERINGER is mistaken in supposing that the changes which he suggests in the titles of alkaloidal salts, would receive any indorsement from pharmacists. Granting that the composition of alkaloidal salts of the haloid acids would be indicated more clearly by the substitution of the term hydrochloride for hydrochlorate and hydrobromide for hydrobromate, we fail to see how uniformity in chemical nomenclature would be advanced by the change; for in making any such change the titles of salts of the oxygenated acids would also have to undergo revision, and it is easy to conceive what the ultimate result of such extreme nicety might be. Physicians who have prescribed morphine sulphate for perhaps half a century under that or a similar title (bearing in mind that the termination *ine* is comparatively recent as applied to alkaloids) would view with dismay the necessity of prescribing this drug under the odd title of *morphine hydrosulphide* or at the least *morphine hydrosulphate*. We had hoped that this old controversy anent the nomenclature of salts of organic bases was at an end and the reasons for adhering to the present nomenclature thoroughly understood, but this is evidently not so and further light on the subject is evidently needed. The committee of revision is best qualified to give definite information in these matters and might render valuable service in the premises by publishing a brief explanation of the reasons which led them to employ the present system of naming alkaloidal salts.

(Written for the American Druggist and Pharmaceutical Record.)

## A FRENCH VIEW OF THE UNITED STATES PHARMACOPOEIA.

By MARC BOYMOND,

*Pharmacien de 1re Classe, Associate Editor of the Repertoire de Pharmacie.*

This edition which contains 114 pages more than its predecessor is distinguished throughout by a notable enlargement of the text relating to descriptions of drugs; their characters of identity and purity, assay and volumetric determination; the preparation and keeping of reagents; alcoholometry and optical rotation; and the determination of tables of equivalent and saturation, etc. Descriptions of a similar kind have already been introduced into the more recent of the European pharmacopœias, but in a form less clear than that observed in the pharmacopœia of the United States, the text of which has been happily increased without making the mistake of converting the work into too much of a didactic treatise. In Germany where the inspection of pharmacies is an undertaking of a serious nature, and the examination of drugs an operation performed daily the official formulary is increased in proportion. Other nations have followed this example. The conditions of pharmacy have undergone a profound modification during the past thirty years, and to the altered condition of things we must conform. The stock in trade of a pharmacy has undergone almost a complete change owing to the discoveries—both lasting and ephemeral—of modern chemistry. It should then be easy of understanding why these men are so careful of their art in a country of extreme liberty; it is in order that their *confrères* may practice their profession under the most favorable conditions both from a technical and a professional point of view.

In the new edition one change of importance is the definite and exclusive adoption of the metric system. In the preceding edition the values are described sometimes in parts, sometimes in grammes and sometimes in grains. Now, the solids are indicated in grammes and the liquids in cubic centimeters. The old system of weights and measures will doubtless continue to be more or less used for some time to come by certain physicians; but little by little this system will disappear to take its place among others of a bygone time, leaving the British pharmacopœia alone in the use of this cumbersome and antiquated method.

A number of changes have been made in the Latin and English official titles. Above all we note the change made in the nomenclature of chemical substances which consists in placing the name of the base first: *morphine hydrochlorate* being now used in place of *hydrochlorate of morphine* as heretofore employed.

In the *formulary*, properly so called, the additions and dismissals effected are notable, though fewer in number than those of the edition of 1883. Prominent among the articles dismissed we remark the *abstracts*—a form of dried extract with the addition of sugar—the elision of which is not to be regretted; their absence will not be missed since they have never been received with favor even in the United States. The additions in the new work have been selected with prudent care, this being especially noticeable with regard to remedies of comparatively recent introduction. In passing we note the addition of glycerin to certain of the soft extracts; the addition of about 1 per cent. of alcohol to chloroform and the adoption of a morphine standard of 13 to 15 per cent. of powdered opium.

We naturally cannot go into any great details in this brief glance at the more characteristic features of the new edition, but we willingly express our appreciation of the book in its *ensemble*. The new pharmacopœia of the United States does honor to its com-

mittee of editors, who represent the most distinguished of the members of the pharmaceutical body, having at its head Charles Rice as chairman. It is a work written by practitioners for practitioners; perfectly clear in its purely scientific and analytical indications, concise and very judicious. It is admirably helped out by the beautiful American typography in which nothing is neglected likely to contribute to form and appearance and which has been influential in converting a simple text book into what may be termed a work of art. The former editions were much appreciated in Europe by those engaged in pharmacy who were qualified to regard the book from different view points. This new decennial revision will meet with equal success, and we must offer our congratulations to its intelligent editors.

(Written for the American Druggist and Pharmaceutical Record.)

## NOTE ON THE CHEMICAL NOMENCLATURE OF THE U. S. PHARMACOPOEIA.

By PROF. JOHN ATRIFIELD, PH. D., F. R. S., ETC.,

*Reporter of the British Pharmacopœia to the General Medical Council.*

I had understood that the names or headings of the monographs of the U. S. P. would not be altered (*magnesium sulphas*, sulphate of magnesium, for example), and, indeed, the actual heading or title (*magnesium sulphas*) has not been changed. But the English rendering—I cannot call it translation—of the title has been turned round, so as to harmonize with the practice of the majority of modern chemical authors. Thus, for example, it is no longer sulphate of magnesium, but magnesium sulphate. From the literary point of view it is awkward, if not solecistical, for the Latin heading to express one name and the English immediately underneath it to express another name; nevertheless I think that the compilers were wise, as well as politic, in making—what the majority of mankind so dearly love—a compromise. They might, with the British, have continued to give such names as *magnesium sulphas*, sulphate of magnesium, or, with the Germans, have given *magnesium sulphuricum*, magnesium sulphate. They have steered a middle course, preliminary, doubtless, to an abandonment of the Latin channel altogether.

In response to your courteous inquiries I would state that I have produced the Fourteenth American and Fifteenth British editions of my manual of chemistry concurrently, and the British is just published, but the dispatch of the manuscript of the Fourteenth to my United States publishers will be delayed by the time involved in altering almost every paragraph in the work to adapt it to the literary change of front of the chemical nomenclature of the new U. S. Pharmacopœia.

(Written for the American Druggist and Pharmaceutical Record.)

## A SCOTCH REVIEWER.

By WM. MAIR,

*Late Chemist to the Royal Infirmary Dundee, Scotland.*

The United States Pharmacopœia is always regarded by us in Scotland as something distinctly in advance of our own. The processes represent good pharmacy, the data are correct and the requirements precise and not ultra scientific. It must be admitted that there is more of the spirit of advance exhibited in the U. S. Pharmacopœia than in that of Great Britain.

It is disappointing that it has not been found practicable to increase the number of assay processes, but the difficulties in the way of this are not easily surmountable.

The elaborate description of the process of percolation might have been simplified by the adoption of

what some pharmacists would consider an improvement in the apparatus employed. Nothing, in my opinion, can excel for simplicity and efficiency the displacement apparatus made by the York Glass Company, of England. It was still further improved by a Sprengel pump attachment, devised by Mr. Charles Arthur, chemist to the Royal Infirmary of Edinburgh.

The new word *emulsum* provides a desirable differentiation from the general term "mixture."

The provision of indication as to what the various tests employed are intended to exclude is a great advantage, for while the work is not intended to be a students' manual this will save reference to other works—a consideration to the busy pharmacist.

In following the positive instructions of the convention the committee of revision has had to exclude such an important drug as antipyrin, an omission which acetanilide does not make up for. Among the additions strontium bromide is up to date; it is having a run just as present. I do not know that eriodictyon has quite justified the honored place it has obtained in the list of official drugs. The omissions include some useless plasters, but I cannot imagine why extract of malt should have been discarded. It is still an important agent with us.

The tables for gasometric estimations and optical rotation are new and useful; they will prove more so as the coming pharmacist gets educated up to them.

American pharmacists have every reason to be proud of their *vade mecum*; it is an index of the position of their profession in America and in every way well suited to fulfil its requirements.

(Written for the American Druggist and Pharmaceutical Record.)

### ALTERED COPIES.

BY FERDINAND LASCAR, PH.G.

What at first sight appeared to be one of the proverbial blunders of the incompetent druggist—he that is so oft quoted by the newspaper paragraphist—was brought to my attention recently by a physician. Handing me what seemed to be a prescription written by him not over a month ago, he requested with some indignation in his tone to know the meaning of the first item on the prescription, which he remarked was unfamiliar to him and certainly not the title which had appeared in the original prescription. It only required a glance, with the doctor's explanation, to see that the pharmacist who filled the original prescription had in copying altered the name of one of the ingredients so as to make it difficult for the patient to get the mixture compounded in another pharmacy. The prescription was simple, reading as follows:

Tinct. opii.  
Tinct. lavand. Co.  
Tinct. valerian.  
Spir. ammon. arom. . . . . ss 3 ss.

In the copy about which the physician made complaint *Tinctura opii* had appeared and in its place was substituted the words *Tinct. thebaica*. While it is true that most druggists are familiar with this ancient synonym for tincture of opium, there is no doubt that it would prove a stumbling block to many pharmacists, as they would be in doubt whether to dispense the aromatic wine or the tincture. The question also arose as to the right of the druggist to alter a prescription. Certainly it is a case in which, if it came to be decided on its legal merits, it would go hard with the druggist. The motive in altering a prescription in this way is of course evident, and arises, as before stated, from the desire of many druggists to retain custom without regard to the means employed. My own experience with altered prescriptions is that the copier has not always been correct in the choice of a synonym; the er-

rors arising in some instances from the use of titles which have been applied at different times to widely different drugs. Other cases have come to my knowledge where local titles have been employed; this latter being perhaps the most senseless of any of the methods of altering a prescription. As an example of this I will instance a prescription presented to me in the commercial capital of Louisiana; it read thus:

Magnes. sulph. . . . . 3 iss.  
Acid. sulph. dil. . . . . 3 i  
Aque Crotonis, q. s. ad. . . . . 3 vi

I am convinced that the prescriber, who has long since passed away but who was known in life as an earnest and learned man, would never dream of writing such misleading nonsense as *Aque crotonis*. Equally misleading was the copy of a prescription which read:

Aquila alba. . . . . gr. v  
Pulv. rhei. . . . . 3 i  
Magnes. carb. . . . . 3 ii

M. ft. pulv.

In this case the prescriber happened to be well known to me, and I was made aware that *Aquila alba* did not appear in the original prescription, what was ordered being "Calomel gr. v." Now *Aquila alba* is a very old name which was in use by the alchemists to designate various substances, among others sublimed sal ammoniac, precipitated mercury, arsenic and the philosophers' stone.

Another prescription which had evidently undergone changes in the copy read as follows.

Magisterii sulphur. . . . . 3 i  
Sal mirabil. g. . . . . 3 ii  
Tartar. depurat. . . . . 3 iii

Now *Magisterium sulphuris* is washed sulphur, although a colleague to whom I showed the prescription was convinced it stood for precipitated sulphur. Sal mirabil. g. is of course Glauber's salt or sulphate of soda, but as written, the title is misleading, due to the abbreviation of "Glauber" to g. in lower case. A prescription in which the copier had endeavored to display more than the usual smartness turned up the other day. It was intended for a hair tonic and read:

Quinia. sulph. . . . . 3 j  
Tinct. lobeliae  
Tinct. cantharides ss. . . . . 3 ii  
Glycerin . . . . . 3 j  
Spir. tafiae. q. s. ad. . . . . 3 viii

Here I ascertained that the original called for rum; if the copyist was a stickler for Latin he might have used the well known title *Spiritus sacchari*, which would have been understood by the majority of pharmacists. By far the most curious transposition among the number which I have encountered in a lengthy practice was the following, which proved a decided stumbling block, and which I was unable to decipher until after a consultation with the physician. The copy read:

Ethiops alcalisati . . . . . gr. xv  
Sacch. alb. . . . . 3 ss

M. ft. pulv.

The substance ordered was of course *hydrargyrum cum creta*, of which each powder was to contain  $2\frac{1}{2}$  grains.

The wilful alteration of titles in a prescription by the pharmacist who is requested to furnish a copy is something which cannot be condemned with too much severity, as it leads in many instances to trouble between physician, pharmacist and the patient, from the fact that prescriptions filled in one pharmacy present an appearance of decided difference from the prescription as dispensed in another. The ethical side of the case should not be lost sight of. Pharmacists, above all men, should be actuated by motives higher than those that spring from mere commercialism; the practice of our profession calls for exactness—but above all a conscientious regard for its ethics and advancement toward a higher standard.

# Pharmaceutical Progress.

**Nasrol** is the sodium salt of caffein sulphonic acid which is being used as a diuretic.

**Benzoin alumina cotton** is made by boiling benzoin in solution of aluminum acetate, straining, impregnating cotton with the liquid and drying. It has the advantage of ferric chloride cotton as a hæmostatic of not staining.—*Pharm. Post.*

**The pink color in calcium chlorate solution** developed when chlorine is lead into milk of lime in the first step in the manufacture of potassium chlorate has been proven by the spectroscope to be due to the presence of permanganate.—*Chem. Zeit.*, 1893, p. 653.

**Preservation of Eggs.**—From the result of his investigations Körndörfer concludes (*Arch. f. Hygien.*, xvi., 4) that the best method of preserving eggs is to warm them for two days to 50° C. [122° F], or to coat with shellac or varnish. They keep better also in dry than in damp places.

**Rubidium iodide** has much the same therapeutic qualities as has potassium iodide, but it is claimed (*Drog. Zeit.*) that it is free from the deleterious effects which the potassium salt exercises, particularly on the heart. Rubidium iodide appears in white crystals, stable in the air, has a milder taste than potassium iodide and is even somewhat more soluble in water than the latter salt.

**Pilocarpine in Croup.**—Sziklai (*Aertzl. Prakt.*, 1893, p. 914) recommends pilocarpine hydrochloride in croup in doses of 0.02 to 0.07 grammes (three-tenths to 1 grain) *per day* for children of 15 years and of doses of 0.08 to 0.10 grammes (1 to 1½ grains) *per day* for adults. The false membrane is thrown off by the increased exudation from the mucous membrane caused by the pilocarpine, and if not removed by natural means, may easily be removed by the physician.

**Estimation of Fat in Flour and Bread.**—Poulsenke recommends the following method (*Pharm. Zeit.*, 1893, 512): A mixture of 10 grammes of powdered bread, 50 Cc. of water and 1 Cc. hydrochloric acid (sp. g. 1.124) is digested on boiling water for 1½ hours, then neutralized by the addition of about 1 gramme of marble dust, 50 Cc. of chloroform added and shaken for 15 minutes. After standing some hours 25 Cc. of the chloroform is drawn off with a pipette, filtered, evaporated, and the residual fat weighed.

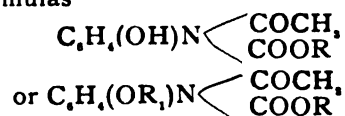
**For Removing Hairy Down.**—Dr. R. B. Morison, in a paper read before the meeting of the American Dermatological Association, says: "There are many women who wish to get rid of the white lanugo down on their faces, upon whom it seems that electricity cannot be used for fear of stimulating the growth of the surrounding hair and the appearance of permanent scars. If a preparation of yellow sulphate of arsenic and quicklime, of equal parts, made into a paste with hot water, be allowed to dry on the hairy skin, it removes the hair for ten to twenty days, and sometimes permanently. On the other hand, nothing seems to take the place of electrolysis when there are a few strong hairs growing from moles, in the removal of moles themselves, in angioma, or in permanent small red spots.

**Titration as a Means of Assaying Drugs.**—In a paper presented at the recent meeting of the American Pharmaceutical Association, Chas. Caspari, Jr., and Alfred R. L. Dohme came to the conclusion (1) That titration with volumetric acid solution is the most reliable and trustworthy method of assaying alkaloidal drugs known to us to-day. (2) That gravimetric results as heretofore generally reported and made use of are in many cases very wide of the truth, and hence unreliable. (3) That some of the methods employed are better adapted to some drugs than to others.

**Cocaine and Pilocarpine Salts with Calomel.**—Schell first observed that when cocaine hydrochlorate and cocaine were mixed in the presence of water the mixture turned black. Lenz observed that this reaction was even stronger with pilocarpine salts than with salts of cocaine, and attributed the coloration to the presence of mercurous oxide. A. Scheider, however, is of opinion (*Pharm. Centralh.*, 1893, p. 519) that the reaction consists in the formation of a double salt of the respective salts with mercuric chloride and that the separated body is metallic mercury, not mercurous oxide.

**Separation of Lead and Silver.**—P. Jannasch proposes (*Ber. D. Chem. Gesell.*, 1893, 1500) the following method of procedure: Dissolve 0.5 grammes of the nitrate in 100 Cc. of water, add 2 Cc. diluted nitric acid, heat to the boiling point, precipitate with potassium dichromate solution, add 15 Cc. diluted ammonia water (1 to 3) and warm on the water bath 15 minutes. When cool filter off and wash the lead chromate 3 or 4 times with weak ammonia water. To precipitate the silver acidify the ammoniacal filtrate slightly with nitric acid, when the silver will be precipitated as chloride.

**Acetyl and Propionyl Compounds of Oxyphenylurethane.**—Para-oxyphenylurethane and its ethers, on heating with glacial acetic acid, acetic anhydride or acetyl chloride, yield acetyl compounds of the formulas



The propionyl compounds are obtained in a similar manner. Both series of compounds are distinctly characterized as well crystallized bodies, difficultly soluble in cold water and possessing strong antipyretic and analgesic properties.

**Purification of Toluol.**—Priswell (*Chem. News*) recommends that crude toluol of a boiling point of 110 to 130° C. be shaken with one-tenth its volume of sulphuric acid of a specific gravity of 1.803 for 4 hours, allowed to settle, the supernatant liquid decanted and washed with a sufficient quantity of soda solution, and then rectified. The sulphuric acid is not strong enough to affect the toluol, but is strong enough to dissolve a part of the paraffin-like impurities present and to reduce the remainder through polymerisation to a less volatile form.

**Chlorol** is a new French disinfecting fluid, said to have the following composition (*Arch. Méd. Belge*):

|                          |                  |
|--------------------------|------------------|
| Corrosive sublimate..... | } of each 1 part |
| Sodium chloride.....     |                  |
| Hydrochloric acid.....   |                  |
| Copper sulphate.....     |                  |
| Distilled water.....     | 3 parts          |
|                          | 1,000 parts      |

The sodium chloride is added to render the solution more stable; the hydrochloric acid, to prevent the decomposition of the corrosive sublimate in presence of albuminoid matter; and the copper sulphate, for its vomitive effects—in case the chloral should be taken internally by mistake.—*Am. M. S. Bull.*

**Sterilization of Hypodermic Injections.**—According to Moriacci (*Farmaceuta Italiano*) micro-organisms will develop in solutions of strychnine, curara, eserine, morphine, quinine and atropine. Sterilization by means of heat does not, he states, alter the effects of strychnine or quinine at all. Whereas it so alters that of morphine, atropine and eserine that a larger dose than otherwise necessary, must be employed. He urges the necessity of sterilizing the syringe. For atropine and eserine he advises the addition of 1 per cent. of their weight of mercuric chloride, which completely sterilizes, but is not present in sufficient quantity to be harmful in the least. For morphine he says he knows of no method of sterilization that will not alter the effect of the drug.

**Arsenic and its Compounds.**—Dr. Retgers finds that there are only two well defined allotropic modifications of arsenic, and that they closely correspond to the two forms of phosphorus. A silvery-white hexagonal form accords with the red phosphorus, and a black variety, crystallizing in regular octahedrons, corresponds with ordinary yellow phosphorus. It is suggested that there may be a third modification with crystals belonging to the monoclinic system. The brown spots formed upon the cold porcelain, in Marsh's test, are shown to consist of arsenic hydride,  $AsH_3$ , produced by the partial dissociation of the gaseous  $AsH_3$ . This is soluble in boiling xylene and may thus be distinguished from elementary arsenic, which is totally insoluble in xylene. Dr. Retgers also adduces evidence which seems to prove that a lower oxide of arsenic, probably  $As_2O_3$ , is capable of existence (*Zeit. für. Anorg. Chem.*, iv., Aug.).

**Cinchona Alkaloids.**—Grave gives the following modification of De Vrij's method for detecting cinchonidine salts in those of quinine. One gramme of the sulphate of quinine is dissolved, with the aid of heat, in 40 Cc. of distilled water; to the warm solution 6 Cc. of solution of potassium chromate (5 grs.  $K_2CrO_4$  in 95 of water) are added. Most of the quinine is thus precipitated, and to insure complete precipitation the mixture is allowed to stand for a night at a temperature not exceeding  $150^\circ C$ . It is now filtered through powdered glass, and to the solution is added nine or ten drops of a five per cent. solution of sodium acetate. If the quinine salt is pure the solution will remain quite clear for several days. If cinchonidine be present, the liquid becomes turbid, according to the quantity present. This reaction is quantitative, and the cinchonidine may be collected and weighed.—*Four. de Pharm. d'Anvers*. Through *B. and C. Druggist*.

**Separation of Arsenic from Antimony.** L. Garnier. (*Jour. Pharm. Chim.*, 1893 [5], xxviii., 97; through *The Analyst*).—Dragendorff's method for separating these two metals in toxicological analysis consists in treating the mixed sulphides with ammonia, fusing the undissolved antimony sulphide, still containing some arsenious sulphide, with sodium nitrate, and dissolving any sodium arsenate which may have been

formed with water, in which the sodium antimoniate is practically insoluble. The author finds that ammonia always dissolves some antimony sulphide, together with the arsenious sulphide; he therefore recommends Ritter's method. This is performed by dissolving the mirror of arsenic and antimony obtained by Marsh's process in aqua regia and treating the solution with a mixture of tartaric acid, magnesium sulphate, ammonium chloride, and excess of ammonia. The arsenic is precipitated as ammonium magnesium arsenate, and the antimony is thrown down in the filtrate by hydrogen sulphide.

**New Volumetric Methods for the Valuation of Fowler's Solution and of Tartar Emetic.** S. Gyory. (*Zeit. Anal. Chem.*, 1893, xxxii., 415; through *The Analyst*).—Five Cc. of Fowler's solution (*Liq. Arsenicali*) are diluted with 10 Cc. of water; 0.5 to 1 gramme of potassium bromide is added, and the whole acidified with 10 per cent. hydrochloric acid; a drop of methyl-orange solution (1:1000) is added, and the solution titrated with  $\frac{N}{10}$  potassium bromate solution until the red color disappears. The addition of a drop too much of the potassium bromate solution will be revealed by the yellow color of the bromine. For the similar treatment of tartar emetic 0.3 gramme is taken, and 25 Cc. of 10 per cent. hydrochloric acid are added. A simplification of the process may be effected by premitting the addition of potassium bromate; for the oxidation of arsenious or antimonious oxide by potassium bromate in presence of hydrochloric acid must yield hydrobromic acid, which will be ready to react with evolution of bromine when an excess of potassium bromate has been added.

**Sardinine, a new fish ptomaine**, has been obtained by Griffiths (*Chem. News*, 1893, p. 45), who describes it as a white, crystalline, water-soluble substance slightly alkaline in reaction, precipitating as a white crystalline hydrochloride with hydrochloric acid, forming yellow crystalline compounds with platinum and gold chlorides, a greenish one with phosphomolybdic acid, yellowish white with phosphowolframic acid, yellow with picric acid, and giving a precipitate with silver nitrate and with Nessler's reagent. It is toxic, producing vomiting, diarrhoea and death. It was obtained from decomposed sardines and is presumably the cause of such cases of poisoning as have followed the eating of sardines. Among the other ptomaines hitherto isolated from fish are: Parvaline  $C_8H_{11}N$ , hydrocollidine  $C_8H_{11}N$ , scombrine  $C_{11}H_{15}N$ , muscarine  $C_8H_{11}NO_3$ , gadinine  $C_8H_{11}NO_3$ , ethyldiamine  $C_4H_{10}O$ , mytilotoxine  $C_8H_{11}NO_3$ , collidine  $C_8H_{11}N$  and coridin  $C_8H_{11}N$ . The first three were isolated by Gautier and Etard from mackerel, the fourth, fifth, sixth and seventh were isolated by Brieger, and the ninth and tenth by DeConinck. According to Griffiths the sardinine has the formula  $C_{11}H_{15}NO_3$ .

**Alkaloidal Value of Datura Stems.**—As a result of investigations made by him, Alfred R. L. Dohme concludes that the stems of datura stramonium are richer in alkaloid than any other part of the plant. Next in percentage are the seed, then the leaves, and finally the roots. It is also evident that some slight loss occurs during the process of drying. A similar investigation of the leaves, stems, roots and seed of the plant Hyoscyamus Niger has been made, the plants having been gathered in June and imported from Hungary for that purpose. The result was to show that the stems and seed contained little or no alkaloid, while the roots contained 0.017 per cent., which is so small that for all practical purposes it may be regarded as none. The residue in the case of the stems and

seed did not neutralize any volumetric acid solution, although there was a slight gravimetric residue, from which it is inferred there is either no alkaloid present or alkaloid which possesses no alkaline reaction. The leaves yielded 0.173 per cent. alkaloids by titration. Schoonbrodt has found that henbane leaves gathered in June yield less than those gathered at other times, and also that seeds gathered in June yield no alkaloid.

#### Preparation and Valuation of Iodoform Gauze.

—Gay (*Repert. de Pharm.*) uses a mixture of ether and benzin as a solvent for the iodoform and also for the "finish" used. The liquid must be completely absorbed by the gauze. This is packed together before it is entirely dry to avoid loss. The ether and benzin will gradually evaporate through the wrappers. In spite of this precaution Gay reckons upon a loss of from 10 to 15 per cent. as unavoidable, and provides for it by using a corresponding excess of iodoform. Gay's method of estimation is as follows: He operates on a full piece, one meter, or at least half a meter of gauze. Roll up, place in a Soxhlet extraction apparatus and pour on sufficient alcohol to cover it. This apparatus is provided with a back flow condenser and attached to a flask, into which an alcoholic solution of caustic potassa is introduced. If a ten per cent. gauze is operated upon, the strength of the solution should be 5 grammes potassa to 100 Cc. alcohol. The apparatus is placed on a water bath and heated until the gauze and the alcohol are entirely decolorized. The alcoholic liquids are united and diluted with water to 250 Cc., filtered, and 10 Cc. of the product are neutralized with acetic acid and estimated with normal silver nitrate solution. The process can also be applied to the direct estimation of iodoform.

**Phosphates of calcium** and their preparations have been written of by M. Carles (*Jour. de Pharm. d'Anvers*), who points out that in the form of syrups the gelatinous phosphate preserves its initial qualities to the highest degree. The Codex, he points out, does not recognize the syrup of tribasic phosphate of lime, probably on account of the insolubility of the salt. He considers, however, that this preparation has a legitimate success in pharmacy, on account of the fact that, although the salt is in suspension, it is easy, by shaking, to render the mixture homogeneous, and moreover the phosphate retains its jelly-like form for a considerable time, and with this form it is easiest to assimilate. For this purpose the phosphate should be obtained in as great a state of hydration as possible. To insure this, 100 grammes of calcined bones are treated with 150 parts of hydrochloric acid, diluted with two or three times its volume of water. After suitable washing of the bones, the liquid is poured into an alkaline solution in order to precipitate the basic phosphate. With this process the amount of true phosphate can be calculated, and for a good syrup the following formula is used:

|                           |     |
|---------------------------|-----|
| White sugar.....          | 655 |
| Water.....                | 245 |
| Gelatinous phosphate..... | 100 |

1,000

The bi-calcic phosphate has the preference for syrup in the Codex. Here acid is necessary to dissolve the salt. In the mono-calcic salt no acid is necessary, as the salt is dissolved directly in the syrup.

**Caffeine** is the name given a new coffee alkaloid isolated by Dr. Pietro Palladino (*Apoth. Zeit.*, 1893, 443) as follows: Boil the raw pulverized coffee with ten times its weight of water, to which a little milk of lime has been added, repeating until the coffee is exhausted. Collect the decoctions, clear with a slight

excess of lead acetate, filter and free the filtrate from lead by means of sulphuric acid. If strongly colored treat again with lead acetate and finally evaporate to a small volume, and remove the caffeine by shaking 10 or 12 times with chloroform. When free from caffeine evaporate to a syrupy consistency in the presence of an excess of sulphuric acid (how much and for what is not stated). Dilute and again evaporate to drive off the acetic acid. Separate the precipitate formed on the addition of water and filter warm through charcoal. On cooling add potassio bismuth iodide (Dragendorff's reagent) and the caffeine will precipitate. Separate the precipitate, wash thoroughly, mix in cold water, and warming this slightly pass a stream of sulphuretted hydrogen. Remove the iodic acid with sodium carbonate and repeat the treatment of the bisuth salt until the combination of caffeine and bismuth iodide shows itself in fine crystals. Finally when a pure solution of the caffeine is obtained in hydriodic acid concentrate it on a water bath, remove the hydriodic acid with silver oxide and add carefully hydrochloric acid, evaporate and crystallize. Wash the needles of caffeine hydrochloride with absolute alcohol and crystallize out of diluted alcohol. These crystals have the formula  $C_8H_{10}N_4O_2 \cdot HCl + OH_2$ , are colorless, easily soluble in water and not affected by light. It acted as a narcotic poison in physiological experiments.

**Caju, akaju or kadschu gum** are the commercial names given a gum which exudes from the *Anacardium occidentale*. Peckolt describes it (*Zeitschrift d. österr. Apoth. Ver.*, 1893, p. 501) thus: It occurs in hard cloudy stalactite like pieces, friable, externally barely perceptibly streaked, containing internally few air bubbles, more or less transparent, slightly iridescent and yellowish brown in color. The pieces are easily reduced by trituration to a fine brownish white powder which is as readily soluble as is gum arabic. A specimen contained 12.5 per cent. of moisture and 2.5 per cent. ash, of which 25.5 per cent. was lime. 98.6 per cent. was soluble, leaving an insoluble residue of 1.4 per cent. of cortical substance. The 10 per cent. aqueous solution was neutral, yielded a white precipitate on the addition of absolute alcohol, was thickened and clouded by potassium silicate and was thickened but not coagulated by the addition of borax. On adding solution of copper sulphate a dark blue mass separated out, from which, on boiling, traces of red copper oxide separated out, the liquid turning to a blackish brown. The solution becomes of syrupy consistence on addition of iron chloride without coagulating. No reaction occurs with ferrous sulphate nor with lead acetate. Mercury nitrate causes the solution to become cloudy, and after 12 hours forms a thick milky fluid. The gum was found to contain 83.2 of arabin, 0.7 per cent. of extractive, 0.236 per cent. of sugar, 0.339 per cent. of a resinic acid and 0.296 per cent. of  $\beta$ -resinic acid; the two being similar to that occurring in the bark. These and the brown extractive are the cause of the color in the gum. Trommsdorf found 4.8 per cent. of bassorin in the gum, but Peckolt found none.

**Saccharin and Salicylic Acid.** These two bodies appear to be found together in several liquids, especially beers and wines, and Mr. Hairs has published the account of a research on the best method of detecting them when so combined. The well known reaction of transforming the saccharin into salicylic acid by a potash fusion must, of course, be abandoned. So he employs the following process: The liquid is evaporated after being rendered alkaline, as usual, with sodium carbonate and washed sand added as it gets syrupy. The residue is exhausted with alcohol

and the liquid distilled. The residue is taken up with water and this solution, acidulated with sulphuric acid, is extracted with ether, which is separated and distilled, with the addition of a few drops of solution of sodium bicarbonate. The residue is dissolved in hydrochloric acid, and a slight excess of bromine water is added. The mixture is strongly agitated in order to agglomerate the precipitate of bromosalicylic acid, and after a short time filtered. The filtrate is freed from excess of bromine by passing a current of air through it, and then agitated with ether. The ether is separated and evaporated with a few drops of sodium bicarbonate solution and the characteristic sweet residue is left. By fusion with potash, the saccharin is converted into salicylic acid and tested in the usual way. A mixture of five milligrammes of saccharin and 7.5 milligrammes of salicylic acid is easily detected, and no fear need be entertained as to the possibility of any salicylic acid escaping precipitation, and so giving the reaction accredited to the saccharin in the filtrate; for experiments showed that ferric chloride did not give the faintest reaction with the filtrate after precipitation with bromine.—*Journal de Pharmacie d'Anvers*.—Through *British and Colonial Druggist*.

#### Change of Volume when Liquids of Different Densities are Mixed.\*

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From time to time articles appear in our text books, journals and proceedings, offering a rule whereby liquids of different densities may be mixed to obtain any desired intermediate density. These rules are necessarily limited to those liquids which neither contract nor expand when mixed, but the fact has apparently been overlooked that such liquids are rare rather than common.

It has been known for some time that solutions of salts contract when diluted, or in other words, if an aqueous solution of a salt be diluted with water, the volume of the mixture is generally less than the sum of the volumes used in producing it. The same is generally true of indifferent liquids, though in a few cases expansion occurs rather than contraction, and in some no change in volume can be observed.

At the same time that this change in volume occurs, a slight change in temperature also takes place. There is commonly an elevation of temperature, but sometimes a lowering occurs, and in many cases no change in temperature is observed. This change in temperature bears no relation to the change in volume, since contraction may be accompanied by either an elevation or lowering of temperature, or with no change in temperature, and likewise an expansion in volume may be accompanied by a change in temperature in either direction, or with none at all.

In the present paper no attempt has been made to measure the changes in temperature, the object being only to call attention to the changes in volume which occur, to show how nearly universal this change is, and to demonstrate that it is of sufficient extent to render void the use of specific gravity rules, in most cases, for anything except approximate results.

To illustrate, a mixture of glycerin and water in the proportions and quantities used in the table appended, contracts 2.0 Cc., which may be taken as a mean of the contractions. The calculated gravity of such a mixture, provided no contraction takes place, would be

1.1369 (approx.),  $[89 \text{ Cc.} \times 1.2554 = 111.73 \text{ G.} + 77 = 188.73 \div 166 = 1.1369]$ .

But the contraction changes the quantity to 1.1508 (approximate),  $(188.73 \div 164 = 1.15079)$ , a difference of two in the second decimal, which is verified by trial.

The apparatus by which the contractions were measured consisted of a double bulb of glass, the lower of which bulbs was extended into a tube 15 cm. long, graduated to hold 10 Cc. in  $\frac{1}{10}$  Cc. 0.05 Cc. could be read easily in this tube.

The upper bulb was fitted with an accurately ground stopper, the two bulbs connecting at opposite sides.

In using it the lower tube and bulb was completely filled with the heavier liquid at 20° C. by means of a long-stem funnel, then the lighter liquid flowed into the upper bulb, which was filled to the brim, so that insertion of the stopper displaced a part of this liquid, and no air space was left in the apparatus.

The liquids were then mixed by inverting the apparatus and shaking, placed in a water bath kept at 20° C. until this temperature was uniform in the apparatus, then the contractions read upon the graduated tube.

The lower bulb and tube held 89 Cc., the upper bulb 77 Cc.

It was better for appearance sake to have used an apparatus holding equal volumes of each liquid; but as the only object was to show that there is a change of volume in most cases, and as an accurate table showing the extent of such change would be of little or no practical value, no attempt was made to construct such a table.

The common solvents and most soluble salts used in pharmacy were selected for experimentation, the salts being used in aqueous solution, nearly saturated. Gravities were all taken at 15° C.; the liquids mixed and contractions read at 20° C.

The results are given in the following table:

| Heavier Liquid.          | Spec. Grav. | Lighter Liquid.      | Spec. Grav.    | Contraction.           |
|--------------------------|-------------|----------------------|----------------|------------------------|
| Acid, Acetic Glacial.... | 1.0615      | Water ....           | 1.0000         | 5 Cc.                  |
| Acid, Citric.....        | 1.2620      | " ....               | 1.0000         | 0.5 Cc.                |
| Acid, Hydrobromic ....   | 1.2364      | " ....               | 1.0000         | None.                  |
| Acid, Hydrochloric ....  | 1.1754      | " ....               | 1.0000         | 0.75 Cc.               |
| Acid, Nitric .....       | 1.4210      | " ....               | 1.0000         | 6.45 Cc.               |
| Acid, Tartaric.....      | 1.3205      | " ....               | 1.0000         | 0.8 Cc.                |
| Alcohol.....             | .8199       | Ether ....           | .7279          | 1.85 Cc.               |
| Alum.....                | 1.0515      | Water ....           | 1.0000         | Very slight            |
| Ammonia Water.....       | .8977       | " ....               | 1.0000         | Noxe.                  |
| Ammonium Chloride....    | 1.0765      | " ....               | 1.0000         | 0.35 Cc.               |
| Calcium Chloride.....    | 1.3070      | " ....               | 1.0000         | 1.2 Cc.                |
| Carbon Bisulphide.....   | 1.2711      | Benzine ..           | .6975          | None.                  |
| Carbon Bisulphide.....   | 1.2711      | Cotton....           | .9329          | None.                  |
|                          |             | Seed Oil             |                |                        |
| Chloroform.....          | 1.4896      | Ether ....           |                | 2.1 Cc.                |
| Chloroform.....          | 1.4896      | Oil Tur-<br>pentine. | .7279<br>.8751 | Slight ex-<br>pansion. |
| Chloral.....             | 1.3615      | Water ....           | 1.0000         | 0.6 Cc.                |
| Copper Sulphate.....     | 1.2077      | " ....               | 1.0000         | 0.5 Cc.                |
| Glycerin.....            | 1.2554      | " ....               | 1.0000         | 2.0 Cc.                |
| Iron Sulphate.....       | 1.2405      | " ....               | 1.0000         | 0.6 Cc.                |
| Magnesia Sulphate....    | 1.2862      | " ....               | 1.0000         | 1.2 Cc.                |
| Oil Turpentine.....      | .8751       | Ether ....           | 7.279          | 0.5 Cc.                |
| Potass. Bicarbonate...   | 1.1587      | Water ....           | 1.0000         | 0.45 Cc.               |
| Potass. Bromide.....     | 1.3557      | " ....               | 1.0000         | 0.55 Cc.               |
| Potass. Carbonate ....   | 1.4282      | " ....               | 1.0000         | 2.55 Cc.               |
| Potass. Iodide .....     | 1.6440      | " ....               | 1.0000         | 0.55 Cc.               |
| Potass. Nitrate .....    | 1.1377      | " ....               | 1.0000         | 0.25 Cc.               |
| Sodium Carbonate....     | 1.2281      | " ....               | 1.0000         | 1.15 Cc.               |
| Sodium Chloride .....    | 1.2052      | " ....               | 1.0000         | 0.7 Cc.                |
| Sodium Salicylate ....   | 1.1942      | " ....               | 1.0000         | 0.7 Cc.                |
| Sodium Sulphate.....     | 1.1198      | " ....               | 1.0000         | 0.3 Cc.                |
| Soda (caustic) .....     | 1.4 67      | " ....               | 1.0000         | 6.8 Cc.                |
| Syrup.....               | 1.3462      | " ....               | 1.0000         | 0.45 Cc.               |
| Zinc Sulphate.....       | 1.4717      | " ....               | 1.0000         | 1.7 Cc.                |
| Water.....               | 1.0000      | Alcohol .            | .8199          | .465 Cc.               |

\* Read before the Chicago meeting of the American Pharmaceutical Association.

### The Vulcanization of Rubber.

The methods of vulcanization now in general use and which are based on the Goodyear experiments, are divided by the *Gummi Zeitung* into four classes as follows: (1) The cold process with sulphur chloride. (2) The cold process with sulphur chloride vapors. (3) The hot process with melted sulphur. (4) The hot process under steam pressure.

The melting point of crude rubber is about 200° C. when it melts into smeary black mass. Hot vulcanization is carried out at 150° C. with at least 8 per cent. of sulphur.

To vulcanize pure unmixed rubber on the surface of waterproof cloth a mixture of carbon bisulphide and sulphur chloride is used, though petroleum ether, or carbon chloride are frequently substituted for the carbon bisulphide. The finished wares are boiled in a lye made with soap and caustic soda.

Vulcanization with sulphur chloride vapor which is used in the manufacture of "sweat-cloths" consists in subjecting the articles to be vulcanized to the vapors caused by warming a vessel filled with sulphur chloride which is placed on the floor of an air tight chamber made of oak in which the articles are suspended.

Melted sulphur is used in vulcanizing pure rubber goods which are boiled for 15 minutes in a bath of melted sulphur at a temperature of 120° C. The excess of sulphur is then removed by boiling in potash lye. Goods made thus do not freeze or harden when subjected to cold.

The process generally used is that of steam under pressure. The duration of the process for hard and for soft gum is different and varies also with the proportion of sulphur present.

Soft rubber vulcanized under pressure contains on an average 10 per cent. of sulphur, of which only about 6 to 7 per cent. is in chemical combination, the remainder crystallizing out on the surface.

It is essential that during the process the steam pressure should be raised very gradually and that at the close it should be gradually lowered.

The length of time required for vulcanization depends not alone upon the sulphur contents, but also upon the proportion of foreign ingredients present.

Since the melting point of pure gum is 200° C., any too close approach to this temperature in vulcanization is to be avoided.

Vulcanization in the press proceeds much more rapidly than in the open kettle.

Hard rubber requires very different treatment from soft rubber. It generally contains from 30 to 40 per cent. of sulphur and this mass is subjected to a pressure of at least four atmospheres for a period of at least five to six hours. Formerly when hard rubber was vulcanized in water some 15 hours or more were required, and it is sometimes claimed that goods made according to that now obsolete process were better than those made by the processes now in vogue.

### The Otto-of-Rose Crop.\*

In the beginning of last week, as already mentioned in our Trade Report, the otto-of-rose market was thrown into a condition of sudden excitement by the news that the proprietors of the brand which is looked upon as the leading one in the Constantinople market had raised their price, at one bound, from 29s. 6d. to 37s. and 3d. per Turkish oz., f.o.b., Constantinople. This unusually large advance of about 25 per cent. came upon the trade somewhat unexpectedly, although there had been rumors in circulation for some time that, as the year wore on, higher prices might be looked for,

especially as the firm who have now taken the initiative in advancing the quotation have been reported to have been making large purchases in an unobtrusive way for some time past. It may be presumed that these purchases have now been completed, and that there is very little, if any, oil left in the possession of the Bulgarian small peasants, who were well known to have only very small stocks at the beginning of the season. Otto-of-rose, after some years of very low prices, during which, it was said, the cultivator was almost shorn of all remuneration for his work, while the middleman could make but a small part of his accustomed profit, has now again arrived at a position which is likely to offer sufficient inducement to cultivators to lead to the further extension of the rose plantations in Bulgaria, and consequently, in time, to a still more prolonged period of depression. The crop this season has been a moderate one, 1,800 kilos., or 380,000 meticals, being generally named as its extent. There was some fear just before the period of distillation commenced that the total quantity obtained from the 7,500 stills, or thereabouts, which are known to exist in Bulgaria would fall considerably below the actual output, but favorable weather repaired much of the damage which the hard Winter was supposed to have caused. In 1892 the crop is said to have been 280,000 meticals, or 1,350 kilos., and this meagre yield at once led to an advance in price upon the quotations of 1891. Upon the same principle a further rise this year was certainly justified, for although the 1893 output has exceeded that of 1892 by about 450 kilos., there was at the opening of the present season scarcely an ounce of old oil in stock anywhere, while, on the other hand, nearly 250 kilos. of old otto-of-rose were known to exist in dealers' hands in the early Summer of 1892; besides which consumers were probably better stocked at that time than they are now.

Ten or more years ago a crop of 1,800 kilos. of otto-of-rose would have been looked upon as a very good one, and certainly not as justifying an advance in price. But rose-culture has extended considerably in Bulgaria, and there is every likelihood that it will continue to expand if the country continues to develop its resources peacefully. There can be little doubt, however, that the gradual depreciation of the oil which has followed the greater abundance of supply, and the growing demand for articles of luxury among all classes, have powerfully contributed to increase the consumption of otto-of-rose in soap making, perfumery and confectionery. The proof of this lies in the undoubted fact that, although the annual production of rose-oil has increased by about 25 per cent. within the last fifteen years, the stocks are generally much smaller now than they used to be. The total production of otto-of-rose in Bulgaria during the last ten years has been, as nearly as it is possible to estimate it, 20,250 kilos., representing an annual wholesale value of from 80,000l. to 90,000l. The lion's share of this is no doubt eaten up by the handful of Constantinople houses, who combine the exportation of otto-of-rose with the financing of the small Bulgarian growers. Still, it also represents the profit of a large and increasing number of Bulgarian wholesale manufacturers, and the livelihood of hundreds of small peasants; and it is to be hoped that the majority of these interested parties will consider whether they are acting wisely in adhering not only to antiquated modes of distillation, but also to their equally ingrained habit of adulterating their produce, when they must know that within a very short space of time they will have to encounter the competition of a large German firm of essential-oil distillers, with all the elements of success that commercial and scientific knowledge can give.

\*From *The Chemist and Druggist*.

# THE STARCHES IN SUBTERRANEAN STEM DRUGS.\*

By EDSON S. BASTIN,

College of Pharmacy of the Northwestern University.\*

In a preceding article published in this journal (for September 28th, page 181) an account was given of the starches contained in the most important of the root drugs. In the present one it is proposed to give a similar account of those that occur in the more important of the underground stems that are employed as medicines.

In most cases several different samples of the same drug have been studied, and in instances where notable differences occur two or more drawings of the same species have been made, to show the limits of variation. It will be observed also that each set of drawings includes a sufficient number of grains to illustrate all the important variations in form and markings that occur in the specimen studied. In those cases where the drug includes the attached rootlets as well as the

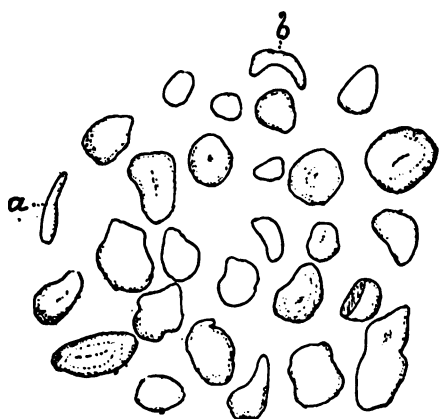


FIG. 1.—STARCH OF ASPIDIUM MARGINALE.

rhizome, no considerable differences have been observed between the starches of the rhizome and those of the roots of the same species.

As was to be expected some subterranean stem drugs are destitute of starch, other related substances taking its place functionally. For example, none occurs in *Iris versicolor*, in *triticum repens*, in *polygonatum giganteum*, and in *arnica montana*. The fleshy scales of the bulbs of *urinea scilla* and of *allium sativum* are also destitute of it. Other drugs, as *cypripedium pubescens* and *spigelia*, contain it in small proportion, while most of the remainder studied contain it in abundance. Some rhizomes, however, as that of *geranium maculatum*, contain it abundantly in the season of rest, but are nearly destitute of it in the actively growing period.

It will be observed that some of the starches, as those of *zingiber*, *galanga*, *colchicum*, *orris root*, *geranium*, *caulophyllum* and *jalapa*, are strongly characteristic, while the rest are much less so, but still in most instances would serve as important aids in the identification of the drugs, and in detecting adulterations.

As in the previous article all the drawings have been made to the same scale and a magnifying power of 875 diameters has been uniformly employed.

The specimen of *aspidium* studied was *A. marginale*, and the starch is illustrated in Fig. 1. The grains are sometimes rounded in outline, but more commonly elongated or irregular, and they are often flat and thin; *a* and *b* in the figure are edge views of two of the grains. The hilum is variable in position, sometimes

near the center, at others well toward one end. Rarely one or two stratification lines may be observed. Very few grains show a cross with polarized light.

The parenchymatous tissues of ginger contain starch in great abundance. The large grains are

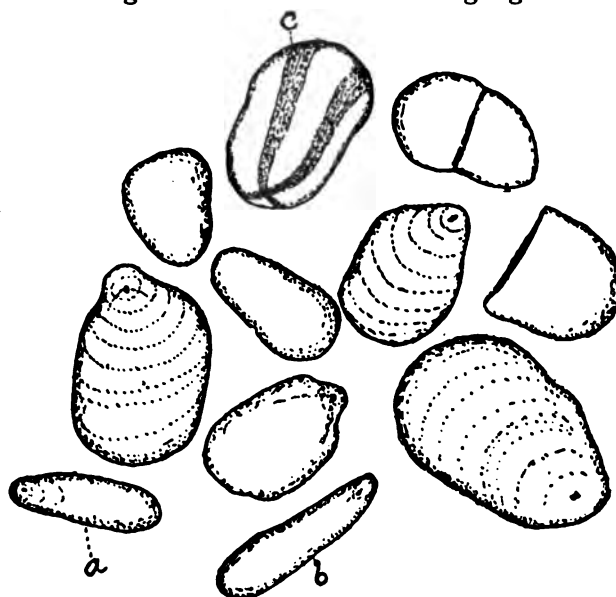


FIG. 2.—STARCH OF CHINESE GINGER.

mostly ovate but sometimes elliptical in outline and decidedly flattened. *a* and *b* in Fig. 2 are edge views of two of the grains. The hilum is distinct and located close to one end, and that the smaller one, where there is a difference. It is occasionally, though rarely,



FIG. 3.—STARCH OF GALANGA.

slightly fissured. The grains are sometimes fissured across near the middle or broken in two. Eccentric stratification lines are frequently faintly visible on the larger grains, if the light be properly manipulated. The very unequal-armed polarization cross looks, when the grain is viewed flatwise, as shown in *c*.

\*From *The Apothecary* through the courtesy of whose Editor the cuts are here reproduced.

The drawings are made from a specimen of Chinese ginger, but an examination of other varieties did not reveal any considerable differences.

The grains of galanga starch like those of ginger are large and have the hilum eccentric, but here the resemblance ends. The grains are mostly long ovate in outline but frequently somewhat irregular, the hilum is located near the larger end, is commonly fissured, and from the fissure delicate branching striæ run toward the smaller end. The eccentric stratification curves are faint, but, in good light, not very difficult to detect on the larger grains. *a* and *b*, Fig. 3, show the effects of polarized light on grains viewed edgewise and flatwise respectively.

In calamus the starch is abundant but small grained and the grains show no very characteristic structure.



FIG. 4.—STARCH OF CALAMUS.

They are oblong, rounded, or more or less irregular in form, with a central or subcentral hilum and no observable stratification lines. Some grains are double and treble and others show one or two flat surfaces. Few are large enough to show the polarizing cross. This when visible is nearly equal-armed. Figs. 4 and 5 represent starches from two different specimens.

Only one specimen of orris root was studied, and it was uncertain from which of the species constituting

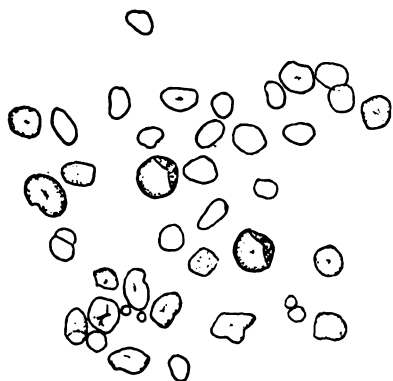


FIG. 5.—STARCH OF CALAMUS.

the source of this drug the specimen was derived. Whether the starches of *iris florentina*, *I. pallida* and *I. germanica* are all similar, or whether there are characteristic differences, are problems which remain to be investigated. The starch of the specimen studied is, however, quite characteristic. The grains are very abundant in all the soft tissues of the peeled rhizome. Most of them are elongated, rounded at one end and tapering toward the other, which is usually truncate. Some of the grains, however, are three-lobed, with one of the lobes truncate. Other grains take somewhat irregular forms. In the typical kind, first described,

the hilum is located near the larger end and surrounded by one or more stratification curves. *a* and *b*, Fig. 6, show two grains as seen by polarized light.

The parenchyme of *veratrum album* is abundantly supplied with small, usually spherical or spheroidal

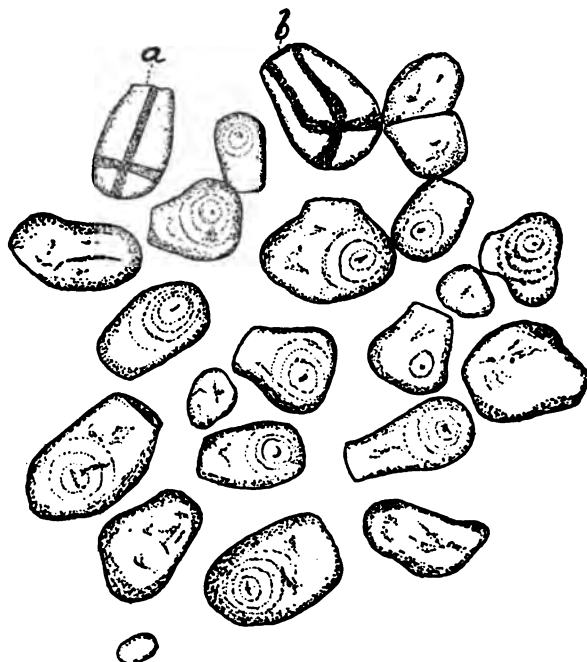


FIG. 6.—STARCH OF ORRIS ROOT.

starch grains, having a central hilum. In the larger grains one or more stratification lines are sometimes faintly discernible. Double grains are occasionally seen, and single ones with one, or rarely more than one, fracture surface. In the few grains large enough to show the polarization cross, that cross is rectangular and equal-armed. In Fig. 7, *a*, *b* and *c*, are shown respectively a double grain, one with a fracture surface and one as seen by polarized light.

Fig. 8 illustrates starch from another specimen of the same species, but probably from a different locality. It will be seen that the resemblance in all essential features is very close.

Fig. 9 represents starch from *veratrum viride*. There is such a close general resemblance between this and

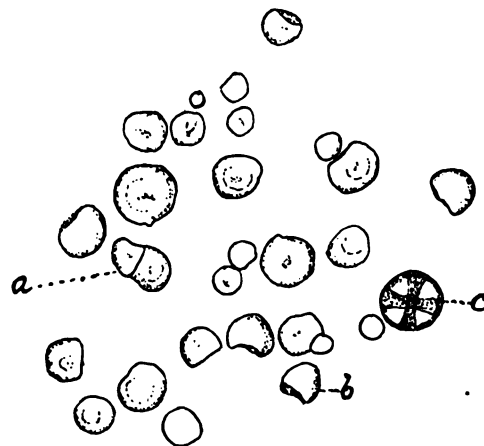


FIG. 7.—STARCH OF VERATRUM ALBUM.

that of *veratrum album* that it is doubtful whether the two drugs could be distinguished by the starches alone. The chief differences between them, so far as I have been able to determine from the specimens at hand, are that the hilum in *veratrum viride* is rather more dis-

inct, and a much larger number of grains are compound; triple, quadruple, and even sextuple grains not being infrequent. But a much larger number of specimens from different localities should be examined to determine whether these differences are constant.

The grains of *symplocarpus* starch are so minute as to appear almost structureless under a magnifying power of 875 diameters. Neither hilum nor stratification lines are discernible, and they do not show a cross by polarized light. This drug, unimportant in itself, has attention directed to it because it has been ob-

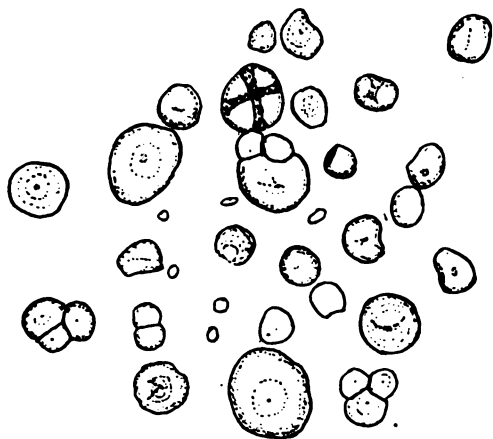


FIG. 8.—STARCH OF VERATRUM ALBUM.

served recently that it is sometimes substituted for *veratrum viride*. The rhizomes are cut into quarters longitudinally without removing the rootlets and dried. They then bear a close general resemblance to the genuine drug. Fresh and perfect specimens are of course readily distinguishable from the latter by the coarser rootlets, the thicker cortex, the larger wood bundles in the cortex, and by their possession of relatively few overlapping leaf-bases at the top as well as by the odor and taste; but in the case of fragmentary, or imperfect specimens in which many of the above char-

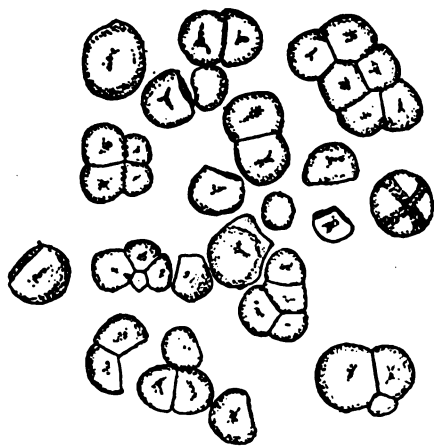


FIG. 9.—STARCH OF VERATRUM VIRIDE.

acters are difficult to observe, the marked difference in the starches would afford a most convenient and certain means of discriminating between them. The starch of this drug is shown in Fig. 10.

The starch of *cypripedium pubescens* was examined, but not that of *C. parviflorum*. The drug contains but a small proportion of starch, and this is small grained, and has no very characteristic structure. The grains are angular, flattened, with a sub-central hilum and without perceptible stratification lines. They are not infrequently double or triple. It is difficult, even in

the larger grains, to observe any cross by polarized light. Fig. 11 shows a group of them.

The rhizomes of *dioscorea villosa* contain starch in abundance throughout the parenchymatous tissues. The grains are sometimes rounded, or more commonly oblong, more or less angular, or obscurely many-sided, usually simple, but sometimes double, triple or multiple, hilum central and rarely surrounded by one or two faint stratification lines. There is not infrequently a straight or angular fissure through the hilum, and this is surrounded like a penumbra with an area which refracts the light differently from the rest of the grain and which is usually stellate or angular in form, as shown in *a* and *b*, Fig. 12. *c* and *d* show grains as they appear in different positions when viewed by polarized light.

*Sanguinaria* also contains starch in considerable abundance. The grains are mostly spherical, or nearly so, with the hilum central or subcentral, and not infrequently angularly fissured, the fissures, however, usually small, stratification lines evident only on the larger grains, and then not numerous, polarization cross usually rectangular, and equal-armed. Some of the grains are double, and rarely triple or quadruple ones are found. This starch is shown in Fig. 13.

Specimens of the rhizomes of *geranium maculatum* that contain little or no starch frequently occur in the market. This, as

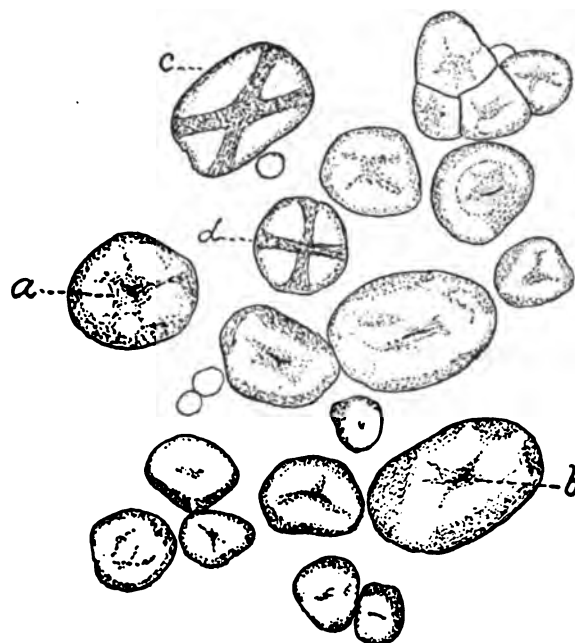


FIG. 12.—STARCH OF DIOSCOREA VILLOSA.

already suggested, is probably owing to the season of gathering, for other specimens contain it in considerable quantity. The grains are elongated, often two or three times as long as wide, usually thicker at one

end than at the other, frequently somewhat flattened, hilum usually eccentric, and located nearer the larger end, or sometimes nearly central, stratification lines seldom visible, and then but faintly, polarization cross usually oblique angled and unequal-armed. About the hilum is often seen an elliptical, rounded or somewhat lobed area, less refractive than the rest of the grain, as shown in *a*, Fig. 14. *b*, *c* and *d* are different grains viewed by aid of the polariscope.

The rhizomes of podophyllum gathered in late Autumn, or in very early Spring, have the parenchymatous tissues heavily charged with small grained starch. The grains are spherical or spheroidal, mostly single, but not infrequently double or triple, hilum central,

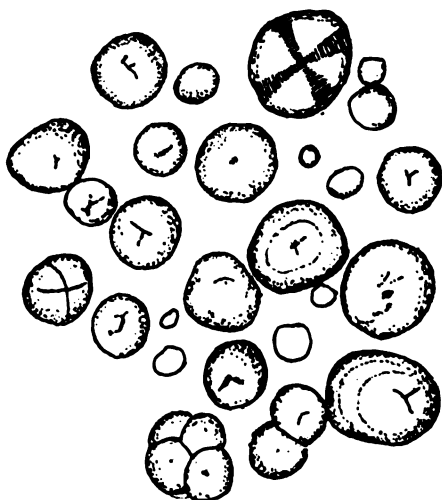


FIG. 13.—STARCH OF SANGUINARIA.

polarization cross rectangular and equal-armed, and no stratification curves observable. The hilum is seldom fissured, and is not distinctly visible, except in the larger grains. Fig. 15, *a*, shows one of the grains

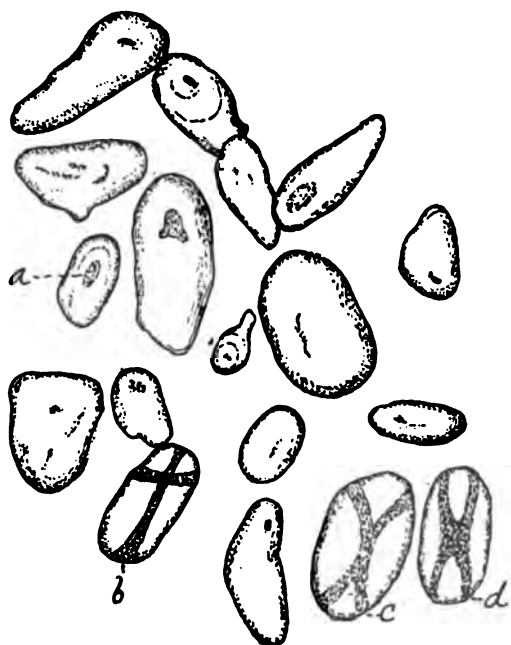


FIG. 14.—STARCH OF GERANIUM.

as viewed by polarized light; the rest are as they appear by ordinary light.

Valerians from several different sources were studied, German, English and Vermont valerian, as well as other specimens of unknown origin.

In all, the starch grains are spherical, ellipsoidal, somewhat angular, or more or less irregular, hilum central or subcentral, often slightly fissured or more transparent near the center, sometimes double or triple but much more commonly single; many of the single grains, however, show one or more flat fracture surfaces; concentric markings, few or none except on occasional quite large grains, where they are more numerous and distinct; polarization cross usually rectangular and equal-armed. An observed peculiarity of valerian is that some of the cells—usually lying near the inner part of the middle cortex—contain starch grains much larger and more distinctly marked than the other cells. Figs. 16, 17, 18 and 19, respectively, represent starches from English, Vermont and German valerians, and a valerian of unknown origin. The starches of Figs. 16, 17 and 19 are so nearly alike in all essential parts of their structure that they might well have all been derived from the same plant, but

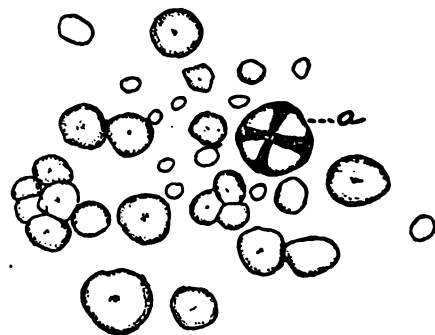


FIG. 15.—STARCH OF PODOPHYLLUM.

usually rectangular and equal-armed. An observed peculiarity of valerian is that some of the cells—usually lying near the inner part of the middle cortex—contain starch grains much larger and more distinctly marked than the other cells. Figs. 16, 17, 18 and 19, respectively, represent starches from English, Vermont and German valerians, and a valerian of unknown origin. The starches of Figs. 16, 17 and 19 are so nearly alike in all essential parts of their structure that they might well have all been derived from the same plant, but

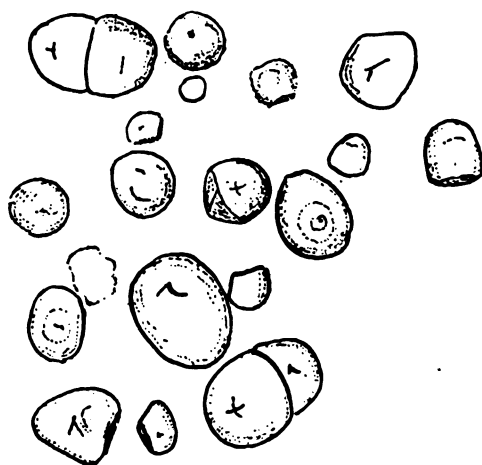


FIG. 16.—STARCH OF ENGLISH VALERIAN.

the grains of Fig. 18, German valerian, are observed to be conspicuously larger and proportionately more distinctly marked. But manifestly there are no other differences of importance; all clearly belong to the same type of structure.

Serpentaria starch, Fig. 20, consists of spherical, spheroidal, or somewhat angular, simple or compound grains, the simple ones, however, predominating. The hilum is distinct, but seldom fissured, central or nearly so, and in the larger grains surrounded by a few rather indistinct, concentric, or somewhat eccentric stratification lines. The polarization cross, as shown in *a*, usually rectangular and equal-armed.

In spigelia starch is not abundant, and the grains vary greatly in size and shape. Some are spherical, others ellipsoidal, others ovate, and still others angular and irregular. The hilum, however, is almost always central or subcentral, and its position is often marked by a small, straight, V-shaped or X-shaped fissure. Delicate concentric stratification circles are visible on some of the larger grains when viewed in good light. The cross of polarization is faint for grains so large, and has equal, though somewhat oblique, arms. This

is shown in Fig. 21. *a* and *b* are grains as viewed by polarized starch is light.

The starch of hydrastis, illustrated in Fig. 22, is very abundant in the rhizome. The grains are sometimes single and rounded, more commonly with one or more flat faces or aggregated in masses of from two to six or more grains. The hilum is central, usually inconspicuous and unfissured, and no stratification curves are observable. No distinct polarization cross is visible.

The starch of caulophyllum illustrated in Fig. 23, though very minute grained, is nevertheless quite characteristic, owing to the way the granules are aggregated. The isolated granules are globular, or much

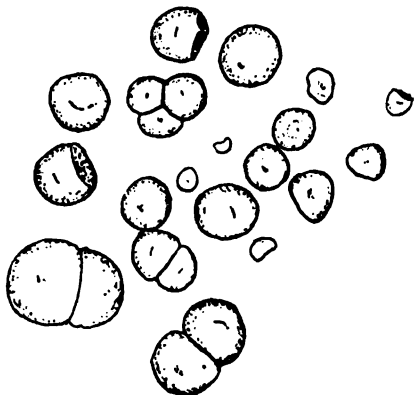


FIG. 17.—STARCH OF VERMONT VALERIAN.

more commonly many-sided, and without evident hilum, or markings of any kind, but they are mostly aggregated in nearly globular masses of from twenty-five to fifty granules. The grains do not polarize.

Cimicifuga starch, shown in Fig. 24, is rather abundant in the rhizome, and consists of grains of moderate size, which are sometimes nearly round, but more commonly angular, or obtusely many-sided and single or aggregated in masses of from two to eight or ten grains. The hilum is central or subcentral, rarely with a small straight or angular fissure.

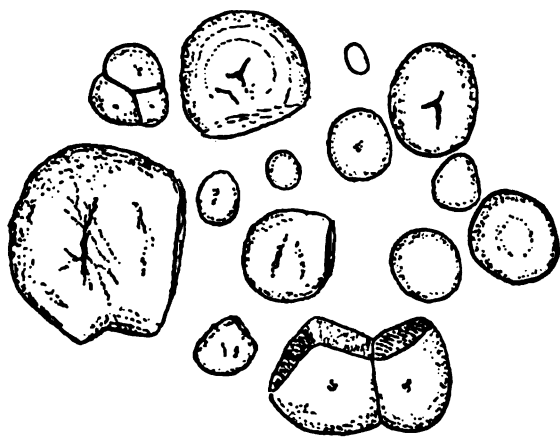


FIG. 18.—STARCH OF GERMAN VALERIAN.

No lines of stratification are observable, except very faintly on the largest grains, and then not more than one or two can be detected. Polarization cross nearly rectangular and equal-armed.

The starch of menispermum is neither very abundant nor very characteristic. It occurs chiefly in the outer portion of the pith, in the soft medullary rays, and in the middle bark. The grains, illustrated in Fig. 25, are globular, or with one or more flattish sides; most commonly single, but sometimes double or triple; hilum central, inconspicuous and unfissured. No

stratification lines are observable, and no polarization cross.

The starch of leptandra occurs in moderate quantity in the rhizome and consists of isolated globular or angular grains mixed with those which are massed in groups of from two to twelve grains. The hilum is central or subcentral, and distinctly observable in the larger grains, seldom fissured, but often marked by a rather large, less refractive rounded or angular area near the center, as shown in *a* and *b*, Fig. 26. On the larger grains one or two stratification curves are faintly observable. Polarization cross nearly or quite rectangular and equal-armed. Freely

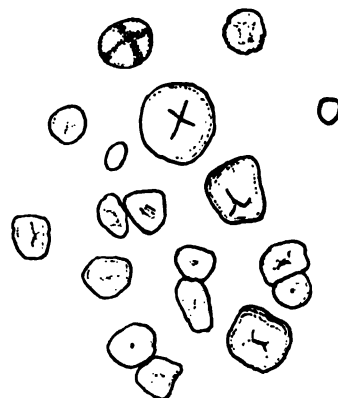


FIG. 19.—STARCH OF VALERIAN OF UNKNOWN SOURCE.

nearly or quite rectangular and equal-armed. Freely

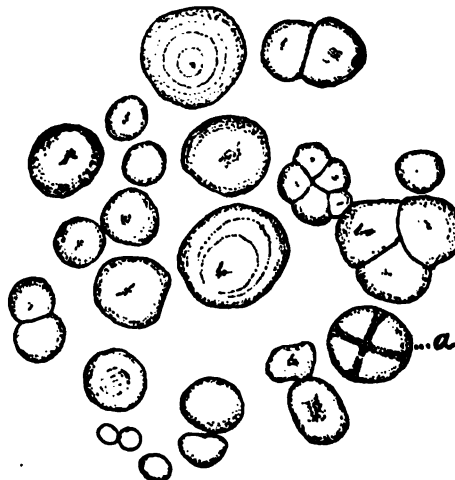


FIG. 20.—STARCH OF SERPENTARIA.

sprinkled among the larger grains are minute, apparently structureless ones.

If the starch of this drug be compared with that of

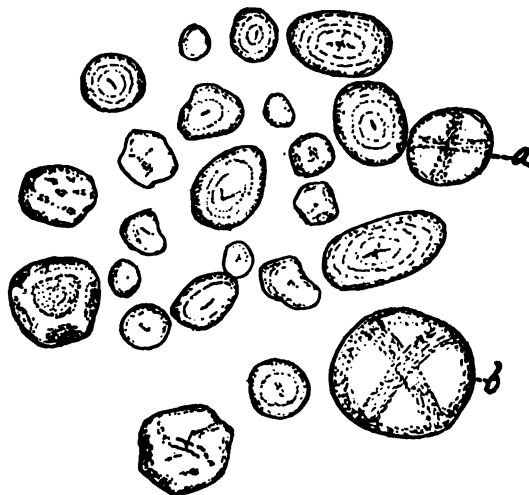


FIG. 21.—STARCH OF SPIGELIA.

cimicifuga, a great similarity will be observed. The grains of the latter, however, average somewhat larger than the former and the proportion of minute grains is not so great.

In jalap the starch is abundant, large-grained and quite characteristic. The grains are dense, rounded or

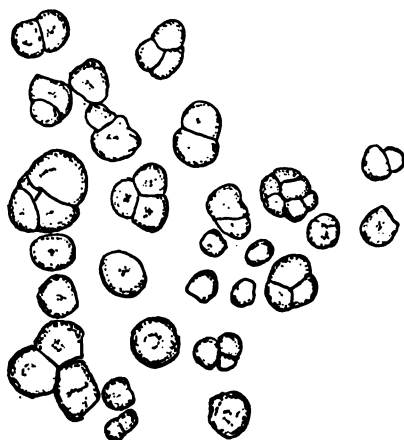


FIG. 22.—STARCH OF HYDRASTIS.

equal-armed in the ordinary position of the grains, as shown in *a* and *b*, Fig. 27.

Aconite is very rich in rather large-grained starch, which is illustrated in Fig. 28. The single grains are round, oblong, or

often with one or more flat faces, but compound grains are quite common and these range from double ones to those composed of eight or more granules. The hilum is central, sometimes faintly fissured in a radial manner, concentric markings indistinct or none and polarization cross nearly equal-armed and nearly rectangular in the simple grains.

A specimen of Chinese aconite, which was examined,

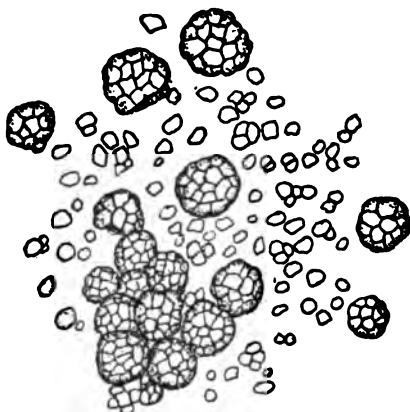


FIG. 23.—STARCH OF CAULOPHYLLUM.



FIG. 24.—STARCH OF CIMICIFUGA.

showed grains of similar shape and size but with a less distinct polarization cross and with the stratification

curves about the hilum much more distinct. The starch is illustrated in Fig. 29.

The starch of aconitum ferox is also very similar to



FIG. 25.—STARCH OF MENISPERMUM.

that of the official drug. Certainly it would be very difficult if not impossible to distinguish the two drugs by the starches alone. Fig. 30 illustrates this starch.

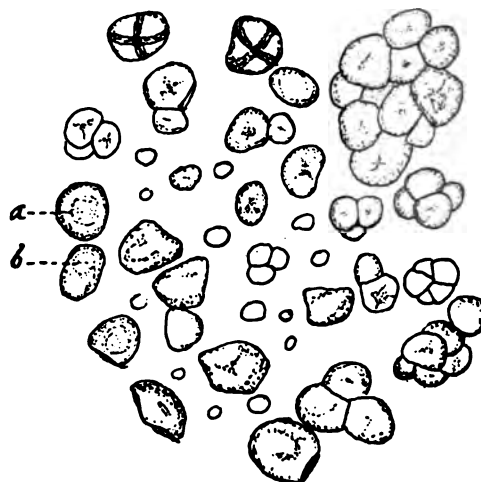


FIG. 26.—STARCH OF LEPTANDRA.

The corm of colchicum usually contains starch in great abundance and it is large grained and quite characteristic. Many grains are single and spherical,

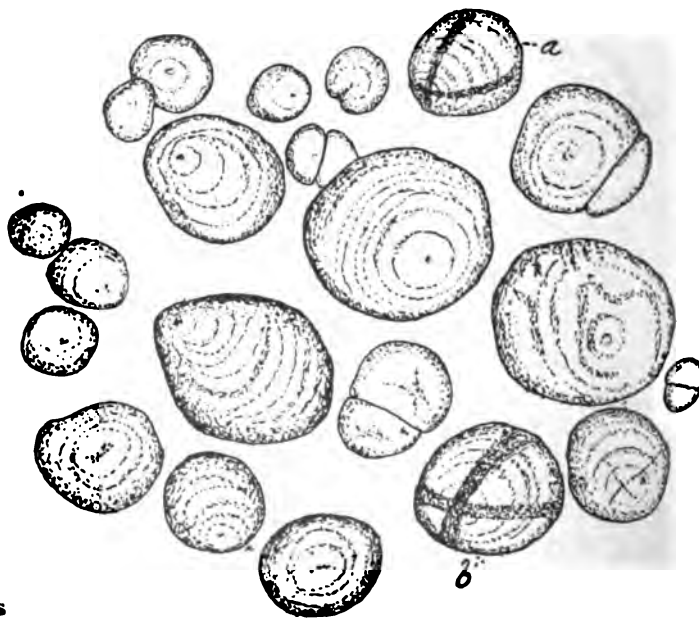


FIG. 27.—STARCH OF JALAP.

spheroidal or present one or two flattish faces; many are double, triple or quadruple, but all, even the smaller ones, are strongly, stellately fissured through the central hilum. The rays of the fissures are often very numerous. These fissurings are well shown in

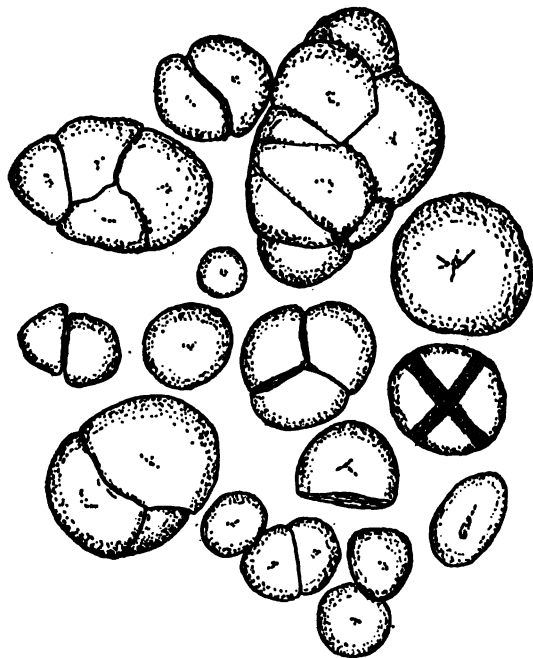


FIG. 28.—STARCH OF ACONITUM NAPELLUS.

the figure, Fig. 31. The polarization cross is rectangular and equal-armed, and the rays are broadest at the intersection of the arms, as shown in *a* in the drawing.

**Peculiar Ferment in Mushrooms.**—M. Bourquelot, in a recent communication to the French Academy of Sciences, has brought forward evidences of the presence of a ferment analogous to emulsine in mushrooms.

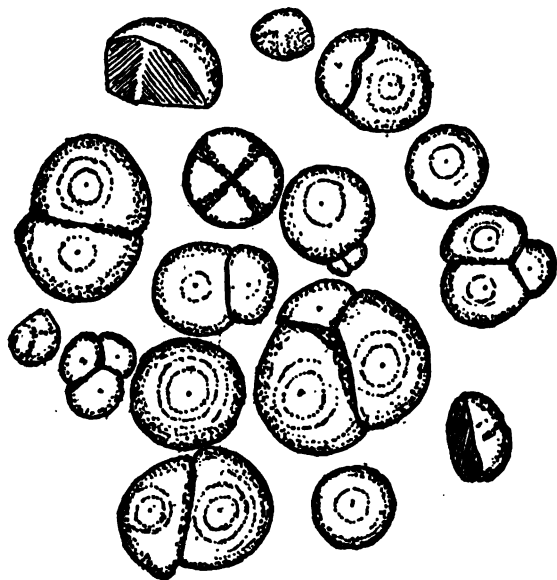


FIG. 29.—STARCH OF CHINESE ACONITE.

It is proved that several mushrooms, and especially those developing on living or dead wood, contain a soluble ferment possessing the property of doubling various glucosides, such as amygdaline, salicine, and coniferine. It is not possible to say that this ferment is identical with the emulsine of the almonds, but it

acts in the same manner and upon the same substances. This ferment was found in two ways. In one, the fresh mushroom was placed in a saturated atmosphere of ether or chloroform vapor, which produces an abundant exudation of liquid holding in solution a large

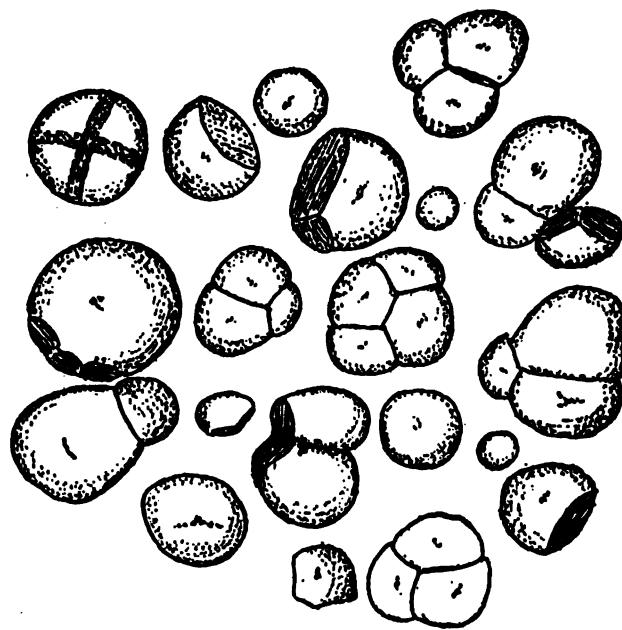


FIG. 30.—STARCH OF ACONITUM FEROX.

portion of the principles contained in the cellular juice. This liquid was placed for 24 or 48 hours in direct contact with a solution of a glucoside; or an aqueous solution was formed by precipitation with alcohol, and treated in the same manner. In the second process, the mushroom was triturated with sand and transformed into a paste; this paste was treated with distilled water and filtered off, the liquid being used as before. One specimen, picked from an elder branch,

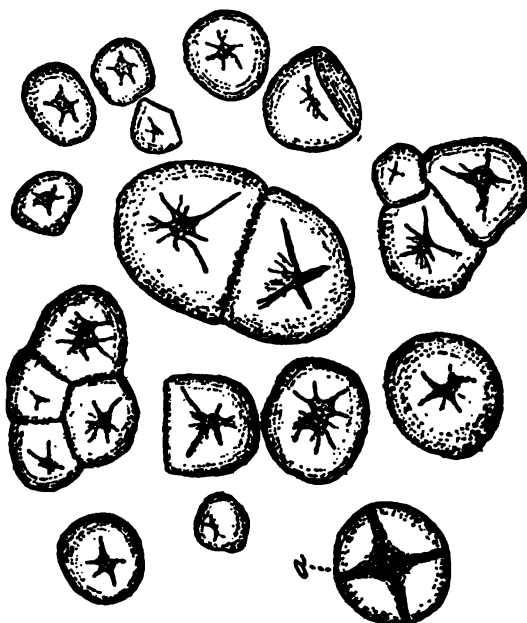


FIG. 31.—STARCH OF COLCHICUM.

gave a liquid which completely converted a dose of coniferine into grape-sugar in the course of three days. The ferment is limited to fungi living on wood, enabling them to assimilate the glucosides contained in it.

## Medical Notes.

Pichi is well spoken of as a remedy in diseases of the urinary tract by Dr. M. Friedlander (*Therap. Monatsheft*).

Good results from Brown-Sequard's succus testicularis, have been observed in a number of cases of anæmia by Dr. D. L. Montané (*Ann. Acad. Ciencias Habana*), who administered it per os instead of subcutaneously.

**Lanolin for Gonorrhœa in Women.**—Asch (*Bull. Gen. de Thérap.*, 62 année, tome i. 22) treats gonorrhœa in women by uterine or vaginal injections of a lotion made up of equal parts of glycerin, lanolin and water. From two to five parts of this lotion are added to a hundred parts of water.

**For Perspiring Feet.**—The following is said to be useful for checking excessive sweating of the feet, and for removing the offensive odor caused thereby :

|                         |            |
|-------------------------|------------|
| Sulph. precip.....      | gr. xxx    |
| Powdered arrowroot..... | ½ oz       |
| Salicylic acid.....     | gr. viij M |

To be dusted over the feet and between the toes.

**Intubation for Whooping Cough.**—Dr. Julius Taub states (*Pest. Med. Chir. Pr.*, 11, 93) that he has obtained excellent results by resorting to intubation in severe case of whooping cough. The tube is allowed to remain in for from 3 to 5 hours at intervals of a day or so. Slight paroxysms are induced at the moment of insertion, but no more occur until some time after it has been removed.

**To Minimize the Dangers of Cocaine.**—M. Riclus says the dose should not exceed one-fifth of a grain for small operations and from one to three grains in large operations. The injections should always be made in the recumbent position and care should be taken not to push the liquid into a vein. M. Gautier maintains that by combining nitroglycerine with the injection all danger can be avoided.

**Methylene Blue for Bright's Disease** has been recommended by Netschajiff (*Deutsch Med. Woch.*) in doses of 0.1 gramme (1½ grains) in wafers three times daily. The urine generally shows a blue coloration within an hour and the albumen and cylindrical casts gradually disappear. He also believes that the character of the urine is a far altered by the administration of methylene blue that the micro-organisms of acute nephritis are deprived of their nutriment.

**Ichthyol in Gynæcology.**—Reinhold Herrman publishes (Inaugural Dissertation at Gorlitz) the result of the use of ichthyol in 142 cases. In 22 of these the uterus itself or its mucous membrane was affected and 11 of these cases were cured, 9 were improved and three showed no result. The parts adjacent to the uterus were involved in the remaining 120 cases, and of these 59 cases were cured, 56 were improved and 5 were not affected. The resorbent and analgesic effect of the ichthyol was quite marked.

**For Sea Sickness.**—A correspondent of the *British Medical Journal* recommends the following :

|                                 |      |
|---------------------------------|------|
| Tinct. aurant. recent.....      | 3iv  |
| Chloralamide.....               | 3ij  |
| Potass. bromid.....             | 3i   |
| Aque chloroformi.....           | 3ij  |
| Aq. destillat. q.s. ad. ft..... | 3iij |

The dose is one ounce. Where there is both much

pain and irritability chocolate tablets of one-tenth or one-twentieth of a grain of cocaine should be eaten quickly at intervals of half an hour or an hour, ice water being sipped between whiles. Where there is pallor with tendency to collapse, chocolate tablets containing one two-hundredth of a grain of nitroglycerin may be given.

### Treatment of Acute and Chronic Rheumatism.

—For the last six years M. Ruel has treated acute or chronic rheumatism externally only. Compresses steeped in the following solution are applied twice a day to the articulation and covered with oil-silk so as to prevent evaporation :

|                      |      |
|----------------------|------|
| Salicylic acid.....  | 3v   |
| Diluted Alcohol..... | 3iij |
| Castor oil.....      | 3vi  |
| Chloroform.....      | 3iv  |

When the applications are properly made the salicylic acid appears in the urine twenty-four hours after.

**Ichthyol Suppositories in Inflammation of the Prostate.**—Dr. A. Freudenberg of Berlin reports (*Centralblatt of Klin. Med.*) the most marked success from the use of suppositories of ichthyol in prostatitis both in the chronic stage and in the latter part of the acute stage. They sometimes cause at first a little local irritation and a tendency to defecate which can usually be overcome by lying down for 15 to 20 minutes. It is advisable to begin with the smaller dose gradually increasing it. The author usually prescribes from 0.3, or 0.6 or 0.75 grammes (4½ or 9 or 11½ grains) of ammonium sulphichthyolate, to be thoroughly mixed with from 2 to 2.5 grammes (31 to 46 grains) of cacao butter and made into a suppository. One of these should be used in the morning and one in the evening. Hollow suppositories should not be used as they liberate the unmixed ichthyol, the effects of which are not always good.

**Acute Phosphorus-Poisoning.**—Dr. Münzer, reports (*Prager Med. Wochenschr.*, 1893, No. 32) the favorable issue of three severe cases of acute phosphorus-poisoning—all coming under treatment late, and in one there was already exhaustion, icterus, and hepatic tumefaction—in consequence of observing the following therapeutical indications :

1. To remove the phosphorus from the gastro-intestinal canal, by means of lavage of the stomach, and evacuation of the intestines with purgatives. The lavage is considered quite useless if more than twenty-four hours have elapsed since the ingestion of the poison ; still, a trial of it is recommended even then. The administration of cathartics, on the other hand, is always indicated, particularly in the first few days after the poisoning. The use of bitter waters or infusion of senna (10 grammes [2½ drs.] : 200 grammes [6½ fl. oz.] of water) is preferred ; while, naturally, oily purgatives—such as castor oil, etc.—are to be avoided

2. To render inert any particles of phosphorus that might have remained in the gastro-intestinal tract, for which purpose the author employs copper acetate, or copper sulphate, or—better still—old, oxidized turpentine oil.

3. To overcome the general acidity, which, while it appears merely as a symptom of the poisoning, may

provoke certain disturbances. It therefore seems quite rational to combat the same with large doses of sodium bi-carbonate, 10-20 grammes ( $2\frac{1}{2}$ -5 drs.) daily.

4. To administer highly nutritious food, rich in albumin, as soon as there is even the slightest tendency toward assimilation of nutriment.

### MISCELLANEOUS FORMULAS.

#### SOLUBLE BLUE FOR LAUNDRY PURPOSES.

[*British and Colonial Druggist.*]

- I. Chinese blue ..... 5 ozs.  
Oxalic acid ..... 1 oz.  
Boiling water ..... 1 quart

Dissolve the blue in the water and add the acid.

- II. Sulphate of indigo ..... 5 ozs.  
Water ..... 1 quart

#### ICHTHYOL IN PSORIASIS OF THE SCALP.

[*Clin. Journ.*]

- Ichthyol ..... 5 parts  
Salicylic acid ..... } of each 1 part  
Pyrogallol acid ..... }  
Vaseline ..... }  
Soft soap ..... } 50 parts

Apply daily to each 'patch. Should it provoke irritation, discontinue it.

#### MENTHOL IN ITCHING AFFECTIONS OF THE SKIN.

[*COLOMBINI, La France Medicale.*]

- I. Menthol ..... 5 to 10 grammes  
Alcohol ..... 100 grammes  
II. Menthol ..... 10 grammes  
Oil of sweet almonds ..... 10 grammes  
III. Oxide of zinc ..... 25 grammes  
Starch-powder ..... 25 grammes  
Vaseline ..... 50 grammes  
Menthol ..... from 0.5 to 0.8 grammes  
IV. Oxide of zinc ..... 10 grammes  
Subnitrate of bismuth ..... 10 grammes  
Menthol ..... 1 to 3 grammes  
Starch-powder ..... 1 to 30 grammes

When the application is to mucous surfaces the mixture should be weakened somewhat in menthol, since otherwise there is a painful burning sensation.

#### DUSTING POWDER FOR CHILDREN.

[*Dr. P. VERNON.*]

- Powdered burnt alum ..... 15 parts  
Porphyryzed boric acid ..... 35  
Precipitated calcium carbonate ..... 150  
Rice starch (or lycopodium) ..... 300  
Carbolic acid (crystallized) ..... 3  
Powdered camphor ..... 2  
Menthol ..... 2  
Eucalyptol ..... 2  
Powdered zinc oleate ..... 2

#### FOR REMOVING WARTS.

[*Dr. 'R. B. MORISON, Am. Dermatological Society.*]

- Corrosive sublimate ..... gr. v  
Salicylic acid ..... 3  
Collodion ..... 3

Apply once a day, removing the old crust before each application. After four dressings the wart can generally be drawn out without pain, the wound being afterward dressed with simple ointment. The author has sometimes increased the quantity of corrosive sublimate to as much as 30 grains instead of five.

#### CHLORAL AND BROMIDES IN WHOOPING COUGH.

[*DUJARDIN-BEAUMETZ—Rev. Gén.*]

##### MIXTURE.

- Syrup chloral ..... 25 parts  
Sodium bromide ..... 5  
Potassium bromide ..... } of each, 1 part  
Ammonium bromide ..... }  
Distilled water ..... 30 parts

Tea or tablespoonful—according to the child's age—morning and evening, with the yolk of an egg, in a glassful of warm, sweetened milk.

#### PÂTE DENTIFRICE AU MENTHOL.

[*Annali di Chimica e di Farmacologia.*]

- Flowers of sulphur ..... 25 grammes (385 grs.)  
Magnesia carbonate ..... 25 grammes (385 grs.)  
Menthol ..... 1 gramme (15 grs.)  
Cochineal ..... 50 centigrammes ( $\frac{7}{8}$  grs.)  
Glycerina sufficient quantity.

### HOT SODA SYRUPS.

#### CREAM CHOCOLATE.

- Confectioner's chocolate .....  $\frac{1}{2}$  pound  
Hot water ..... 2 quarts  
Condensed milk ..... 1 can  
Granulated sugar ..... 5 pounds  
Whites of two eggs.  
Extract of vanilla ..... 1 ounce

Cut the chocolate finely into a porcelain lined evaporating dish and with the aid of heat and a pestle reduce it to a smooth paste. Add the water (boiling hot), stirring constantly, then stir in the condensed milk and sugar. Allow to cool, skim off the cacao butter, particles of chocolate, etc., add the white of egg, previously beaten to a froth, and the vanilla, and strain through muslin.

#### CHOCOLATE SYRUP.

[*T. A. HODGSON.*]

- Van Houten's soluble cocoa .....  $3\frac{1}{2}$  ounces  
Boiling water ..... 2 pints  
Granulated sugar ..... 40 ounces  
Extract vanilla ..... 2 drachms

Dissolve the cocoa in the boiling water, then add the sugar; when that is dissolved, strain and add the vanilla.

#### HOT CHOCOLATE.

[*L. F. STEVENS.*]

- Chocolate .....  $\frac{1}{2}$  pound  
Granulated sugar ..... 3 ounces  
Boiled water ..... sufficient to make 4 pints

Select a rich brand of chocolate. Baker's is convenient because it can be found everywhere, and you do not have to pay a fancy price for it. Grate or scrape fine and triturate with one ounce of the sugar (this may be done preliminary and in larger quantities if necessary); then in a large warmed mortar gradually form a paste under the pestle by gradual addition of boiling water up to 20 fluid ounces, transfer to a porcelain dish, slowly heat and stirring well gradually add the remaining two ounces of sugar and ten fluid ounces of boiling water, and bring the whole to the boiling point for five or six minutes, then remove and stir awhile until ebullition ceases and again heat, and boil for one minute, by this means the cacao butter will not separate and it will not need straining, only skimming, to remove any extraneous matters. The attention here is mainly to be devoted to getting a smooth paste at the first step, and not overheating at the last.

#### CHOCOLATE SYRUP.

[*E. C. MARSHALL.—Prize Formula.*]

1. Powdered chocolate ..... 4 ounces  
2. Cornstarch ..... 4 drachms  
3. Hot water ..... 2 pints  
4. Sugar .....  $2\frac{1}{2}$  pounds

Rub 1 and 2 with 6 ounces of cold water; then pour on 4, stir well and take weight, then boil until the starch is thoroughly cooked, and make up loss in weight, then add 4 and stir until dissolved; when cold add  $1\frac{1}{4}$  fluid drachms of extract of vanilla. Draw in the same manner as coffee.

#### HOT COFFEE SYRUP.

##### I.

- Coffee, freshly ground and roasted ..... 8 ounces  
Sugar ..... 24  
Best French brandy ..... 1 ounce  
Boiling water ..... 16 ounces

Moisten the coffee with hot water and the brandy, pack firmly in a percolator, and pour on the boiling hot water, collect the first 16 ounces of the percolate and dissolve the sugar in the percolate.

## II.

|                |             |
|----------------|-------------|
| Coffee .....   | 1 pound     |
| Glycerine..... | 1. 2 ounces |
| Sugar .....    | 7 pounds    |
| Water.....     | q. s.       |

Mix the glycerin and 84 fluid ounces of water together and moisten the coffee with 8 ounces of this mixture and let stand one-half hour. Then pack firmly in percolator and pour on the remainder of the liquid previously heated to nearly boiling temperature. When this has disappeared from the surface, pour on water until 1 gallon of infusion has been obtained. To this add the sugar and dissolve without heat.

## III.

|                                      |          |
|--------------------------------------|----------|
| Pure Mocha coffee (ground fine)..... | 4 ounces |
| Pure Java coffee (ground fine).....  | 4 ounces |
| Granulated sugar.....                | 6 pounds |
| Hot water.....                       | q. s.    |

Percolate the coffee with hot water until the percolate measures seventy-two ounces. Dissolve the sugar in the percolate by agitation without heat and strain.

## LEMON SYRUP.

|                   |                |
|-------------------|----------------|
| Lemons.....       | No. 2.         |
| Citric acid.....  | 1 fluid drachm |
| Simple syrup..... | 1 gallon       |

Grate the peel from the lemons, bruise the peel with half its weight of sugar and add to one gallon of syrup. Let stand four hours in covered glass or porcelain vessel, strain and add the citric acid.

## HOT LEMONADE.

|  |                            |
|--|----------------------------|
| Ess. lemon, U. S. P. (from fresh oil).....                 | 2 ounces                   |
| Soluble ext. orange peel (or comp. spt. orange N. F.)..... | 1/2 ounce                  |
| Lime juice.....  | 1 ounce                    |
| Citric acid.....   | 1/2 ounce                  |
| Ses. nutmeg.....   | 3 drops                    |
| Soda syrup.....  | sufficient to make 4 pints |

This, largely diluted, draws well with carbonated water as "Soda Lemonade."

## GINGER.

[F. W. FABER.]

|                        |              |
|------------------------|--------------|
| Fluid ext. ginger..... | 2 1/2 ounces |
| Sugar.....             | 40 ounces    |
| Water for.....         | 2 1/2 pints  |

Take 10 ounces of the sugar and mix with the fluid extract of ginger; heat on water bath till alcohol is evaporated. Then mix with 20 ounces of water, shake till dissolved. Filter and add balance of water and sugar. Dissolve by agitation.

## HOT TOM.

|                                  |       |
|----------------------------------|-------|
| Fluid extract of gentian.....    | 3 iss |
| Caramel solution.....            | 3 vi  |
| Soluble extract of ginger.....   | 3 ii  |
| Soluble extract of capsicum..... | 3 ii  |
| Soluble extract of orange.....   | 3 ii  |
| Ses. foam syrup.....             | 3 ii  |
| Simple syrup.....                | 3 i   |
| Tartaric acid.....               | 3 ii  |

## MOCK TURTLE BROTH.

[L. F. STEVENS.]

|                                       |                 |
|---------------------------------------|-----------------|
| Liebig's beef extract }               |                 |
| Armour's "Vigoral" }                  | each 1 ounce    |
| Barley, oatmeal or starch.....        | 1/2 ounce       |
| Gelatin.....                          | 1/2 ounce       |
| Tr. orange peel (bitter) U. S. P..... | 2 drachms       |
| Tr. capsicum.....                     | 18 minims       |
| Lime juice.....                       | 3 fluid drachms |
| Worcestershire sauce.....             | 3 fluid drachms |
| Salt.....                             | 1/2 ounce       |
| Hot water to make.....                | 1 pint          |

Make a thin paste from the starch or other material. Swell the gelatin in cold water, dissolve the beef extract in hot water with the salt, add to the hot mixture the starch paste and softened gelatin and bring all to a boil; strain through a wire strainer; add the flavorings and hot water to finish.

## Notes, Queries, and Answers.

Under this heading we shall, to the best of our ability, endeavor to answer such questions addressed to us as come within the scope of this journal, provided they are accompanied by the name and address of the writer. Unless special instructions to the contrary accompany the query, the initials of the correspondent will be quoted at the head of each answer.

When asking for the formula of an unusual, patented or proprietary compound, always accompany the query with any information you may already possess regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, send also a specimen of the label used on packages of the compound.

**Medicated Troches.** F. R. T., Conn.—The formulas given below are types of the usual cough lozenge; any suitable name may be adopted as fancy suggests, the titles here given being selected with reference to the ingredients composing the troche:

*Ipecacuanha and squill troches:*

|                           |              |
|---------------------------|--------------|
| Powdered sugar.....       | 14 lbs.      |
| Powdered squill.....      | 2 1/2 ounces |
| Powdered ipecacuanha..... | 1 ounce      |
| Tartaric acid.....        | 1/2 ounce    |
| Thick gum.....            |              |
| Rose flavoring.....       |              |

Rub the powders together until thoroughly mixed; add the rose flavoring and sufficient gum to make a stiff paste, then roll out to smooth sheets and cut into troches with a round cutter or mold, making them large enough to give twenty-four to the avoirdupois ounce.

*Compound ipecac troches:*

|                                   |           |
|-----------------------------------|-----------|
| Powdered sugar.....               | 14 lbs.   |
| Purified extract of licorice..... | 1 lb.     |
| Dover's powder.....               | 3 drachms |
| Thick gum.....                    |           |
| Brown coloring.....               |           |
| Lemon flavoring.....              |           |

Make the above ingredients into a stiff paste as in the preceding formula. Roll this out in troches as thin as a 25 cent piece and cut into troches within an oval cutter. The paste should be of a pale brown tint.

*Tolu troches:*

|                       |          |
|-----------------------|----------|
| Powdered sugar.....   | 28 lbs.  |
| Tincture of tolu..... | 3 ounces |
| Thick gum.....        |          |

Mix the ingredients into a stiff paste and beat out thoroughly. Roll out thin and cut into troches with an oval cutter, making twenty-eight to the ounce.

The thick gum, coloring and flavoring mentioned in the above recipes can be obtained through any confectioner.

**The Sale of Alcohol.**—H. H. B., Brooklyn, writes: "Kindly inform me as to whether alcohol or wood alcohol may be sold by a druggist for other purposes than drink without a liquor license."

Alcohol or alcoholic liquors may not be sold as such without a license. When part of a prescription, written by a physician, the case is different; no license is then required except the U. S. license. No license is required for the sale of wood alcohol.

**The Ownership of Prescriptions.**—H. H. B., of Brooklyn, also writes: "I had a dispute with a physician in regard to the ownership of prescriptions. I maintained that the original prescription is the property of the patient, while he contended that it belonged to the pharmacist. Will you kindly state your views on the subject, and inform me as to whether this question has ever been decided in the courts?"

The bulk of legal opinion seems to favor the assumption that the prescription is the property of the patient. This view of the matter has been taken by Judge Kinney, of Detroit, who expressed it as his opin-

ion that druggists could not regard prescriptions as their own property without changing the title in property; he therefore decided that the prescription is the property of the patient. The best course for druggists to pursue when met with a request for the return of a prescription is to give a copy of the document and retain the original.

**Tracing Cloth.** H. W. H., New York.—The sample you send is tracing cloth used by draftsmen for making permanent copies of plans, etc. It is usually prepared by varnishing a fine quality of linen with a solution of Canada balsam in turpentine, to which a few drops of castor oil have been added.

Another method often quoted is the following:

|                         |         |
|-------------------------|---------|
| Boiled linseed oil..... | 10 lbs. |
| Lead shavings.....      | 1/2 lb. |
| Zinc oxide.....         | 1/2 lb. |
| Venice turpentine.....  | 1/2 lb. |

Boil for several hours, then strain and dissolve in the strained composition 2 1/2 pounds white gum copal. Remove from the fire, and when partly cold add oil of turpentine sufficient to bring consistence. Moisten the cloth thoroughly in benzole and give it a flowing coat of the varnish.

**Modified Warburg's Tincture.** L. B. P.—You will find a modified formula for Warburg's tincture in the *National Formulary*, under the title "Tincture Antiperiodica."

**Conjurer's Wine Bottle.**—H. C., Utica. The trick mentioned in the *PHARMACEUTICAL RECORD* of October 27 1892, about which you inquire, is performed as follows:

In a clear glass wine bottle or decanter nearly filled with water dissolve about 20 grains of ferrocyanide of potassium. Then range four empty wineglasses on a table. No. 1 is clean; No. 2 has been rinsed out with a solution of perchloride of iron; No. 3 with a solution of sulphate of zinc, leaving a few drops of the solution in each glass. When the solution is poured from the decanter into these glasses it will appear like water in No. 1, of a rich blue in No. 2, like sherry in No. 3, and like milk in No. 4.

Another experiment of this kind is conducted as follows:

Have a row of five wineglasses half filled with water. Dissolve a little salt in one; iodide of potassium in the next; chromate of potassium in the next; phosphate of sodium in the next, and common washing soda in the fifth. Then add a few drops of a strong solution of nitrate of silver to each glass. In the first a milky white will be produced, the second will be yellow, the third red, the fourth orange, and the fifth brown.

**Registration in New York.**—"T. N.," New York puts the following questions:

"Is a druggist holding a license by examination from the old New York City Board of Pharmacy (1871) entitled to registration by the State Board of Pharmacy? Why not amend the law compelling the State Board to register graduates of the New York College of Pharmacy? Is the examination of the State Board considered higher than that of our college?"

If the State Board of Pharmacy adheres to the strict letter of the law, it will refuse to register a licentiate of the City Board holding the certificate mentioned. To recognize a certificate of that kind, which, it will be observed, was issued prior to the enactment of the amendment to the State Pharmacy Act providing for the registration of licentiates of the county boards who had procured registration in the first instance, by examination, would make the law retroactive.

Regarding the relative grade of examinations as contrasted by the State Board of Pharmacy and the College of Pharmacy of the City of New York, the lat-

ter is, of course, a better test of the knowledge possessed by a student or applicant for registration than those of the former; but these considerations are not taken into account by those responsible for the present enactments. Our correspondent may obtain more extended information regarding the subject of his query by addressing a note to Ed. Dawson, Jr., Syracuse, N. Y., who is secretary of the State Board.

**Toilet Creams.**—F. T. C., Ohio, writes: "Please publish some good formulas for toilet creams in your next issue." We give below a few selections from our book of recipes:

**Toilet Cream:**

|                           |       |
|---------------------------|-------|
| Benzoeated lard.....      | 6 oz. |
| Oil of sweet almonds..... | 1 oz. |
| Glycerin.....             | 1 oz. |
| Tincture of benzoin.....  | 1 oz. |

Mix the first two and the last two separately; then blend together with a wooden paddle and perfume as desired.

**Glycerin Cream:**

|                           |            |
|---------------------------|------------|
| Spermaceti.....           | 3 ozs.     |
| White wax.....            | 1 oz.      |
| Oil of sweet almonds..... | 8 fl. ozs. |
| Borax.....                | 1/2 oz.    |
| Glycerin.....             | 3 fl. ozs. |
| Orange flower water.....  | 1 fl. oz.  |
| Oil of rose.....          | 5 drops    |
| Osso of rose.....         | 3 drops    |

Melt the wax, spermaceti, and oil of almonds together; dissolve the borax in the orange flower water and glycerin, previously mixed; pour the solution a little at a time, into the melted mixture, stirring the preparation without ceasing until all the solution has been fully incorporated, and a homogeneous product results; finally add the essential oils.

**New Cold Cream:**

|                           |           |
|---------------------------|-----------|
| Oil of sweet almonds..... | 100 parts |
| White wax.....            | 100 parts |
| Spermaceti.....           | 20 parts  |
| Glycerin.....             | 300 parts |
| Boric acid.....           | 15 parts  |
| Warm filtered water.....  | 100 parts |
| Perfume to suit.          |           |

Melt the wax and spermaceti, add the oil, separately dissolve the boric acid in the glycerin, heat and while warm add to the warm fatty solution, then add the warm filtered water at once and stir constantly until a smooth ointment is complete. Before it is too firmly set add a suitable perfume.

**Ginger Ale Extract.**—J. L. P., Texas. The following is accounted a good process for the production of a ginger ale extract:

|                                   |         |
|-----------------------------------|---------|
| Tincture of capsicum.....         | 1 oz.   |
| Fluid extract of ginger.....      | 10 ozs. |
| Distilled water.....              | 15 ozs. |
| Pumice stone, in fine powder..... | 1 oz.   |
| Caramel.....                      | q. s.   |

The tincture and fluid extract are mixed with the water and set aside in a cool place for about 24 hours. The pumice stone is then well mixed with this, by rubbing it down with a little of the fluid at first and then adding to the whole. After a short time it is transferred to a filter and what passes through at first is replaced in the filter until the filtrate is perfectly bright; lastly add caramel sufficient to color.

**Bleaching Wax.**—A. N., New Jersey, asks for information regarding an ozone or peroxide of hydrogen process for bleaching wax. We are not aware that wax bleachers employ any direct ozone process in their operation. The method usually employed is as follows:

To the melted wax add powdered nitrate of soda in the proportion of 1 ounce of the latter to every pound of the former. Afterward add dilute sulphuric acid in the proportion of 20 ounces of dilute acid to every pound of wax, keeping the wax warm and stirring the while. Let it stand a short time and then fill up the jar with hot water and allow the whole to cool. The wax should then be white. Afterward wash with water.

*Written for the American Druggist and Pharmaceutical Record.*

## TIPS ON ADVERTISING XII.

By JOSEPH AULD,  
Burlington, Vt.

Without any doubt the best way to reach the purchasing public at the present time is by newspaper advertising. The newspaper is sought for, paid for and welcomed in every household, and is read by everyone. It is, therefore, the best and surest way of reaching the people.

Circulars and "dodgers," except in rare instances, are not profitable. They do not reach the people—



## IN WET WEATHER

MANY PEOPLE catch cold. A little carelessness will make much trouble.

Don't be careless—don't get your feet wet; serious illness comes that way.

But if you do catch cold, get something at once to ward off the effects. Never neglect a cold.

Preservation of health is simple, it is only watching carefully for the small troubles.

Come to us for preventives against wet weather troubles.

A DIME NOW MAY SAVE A DOLLAR TO-MORROW.

**Wm. Cairns,**

Pharmacist,  
ATCHISON, KAN.

Designed by Jos. Auld. The original was without this cut.

that is, they are not read by them; and if read do not carry the same weight and influence as do newspaper advertisements. Therefore the average circular is not a profitable investment. If a well-worded and attractively printed circular were sent out as a sealed letter this objection might not hold so strongly. If circulars are to be used I would send them as sealed letters or by the hands of a uniformed messenger boy.

If the town had newspapers I would use them to the

exclusion of circulars. If it had no newspapers I would send out circulars as above.

To make a success of a retail drug business I would first of all look to my store. It should be bright, cheerful and tastefully arranged; the attendants should be quiet, discreet and gentlemanly. I would make it possible at all times for a modest lady or gentleman to come into my store and make such personal purchases as must be made at drug stores with-

## THE NEW OF THE MOON



Is said to be a good time to cut hair. There will be a new moon to-night.

In all phases of the moon you need drugs and toilet articles.

Don't keep house without a medicine closet; we can equip it with all the necessary articles, as well as supply all standard medicinal preparations and drugs.

We give a great deal of care to the compounding of prescriptions from drugs of high quality.

**H. B. HEFFLEY,**

Drugs, Perfumes and Toilet Articles,  
JOHNSTOWN, PA.

Designed by Jos. Auld. The original was without cut.

out being compelled to run the gauntlet of one or more idle observers either within or without the counter or back rooms. I would make it my business to see that my store secured the confidence of people. These things are primary, and without them advertising is useless.

Then I would take up the advertising as follows:

*From Printers' Ink.*

## For that "After the Ball" Feeling

come to us and we'll fix you up something at our soda fountain that will make you feel like a new man. You'll like it so much you'll want a bottle in the house all the time. It's a specialty of ours and we call it ———.

D. RUGS.

Beginning, say, in January, I would take advantage of the weather and print a series of opportune advertisements, advertising special goods. I would take advantage of the changes in the weather during the whole year to bring forward seasonable goods. During wet disagreeable weather I would use the advertisement on the preceding page. I would introduce astrology and other superstitions.

I would take advantage of the prevalence of contagious diseases by special advertising. I would call attention to any and every common complaint which was prevalent, for which my stock would furnish a remedy. I would carry and advertise homœopathic remedies, taking up common complaints for which these remedies are specifics.

I would take up every article of the drug trade singly from time to time, and bring it to the attention of the public in an attractive way.

To advertise the prescription department I would add to every advertisement a few lines.

The Sky  
Grows Gray,  
The Thermometer  
Drops Lower.

Winter comes on apace, and with it comes the usual cracked lips, rough skin and chapped hands. Neglect of such conditions means in the course of a few days a change from a petty annoyance to a positive disfigurement. To save mending avoid breaking. Remove the first

sign of annoyance by the use of Glycerin Jelly. Put up in convenient tubes, elegant to use, prompt in results. Free from stickiness or greasy feeling—15c.

•••

A  
Magician's  
Wand.

No matter how mild the Winter there still may be more or less occasion for a throat spray. We show you a line from the plainest spray to the most complete Steam Atomizer.

If your physician does not specify any particular make we'll help you decide on something reliable, from 60c. to \$3.00.

**Food Warmers.** The acme of convenience. They save time, labor, patience, health. Milk or food can be quickly warmed at any time. We have the Food Warmers in half a dozen styles and sizes. From 50c. to \$2.00.

**Insomnia** whether caused by nervousness or cold feet is decidedly unpleasant. A magician's wand to remove the latter cause can be had in the shape of a hot water bag. From \$1.25 to \$2.00.

W. H. HENRY DUNN, }  
Opp. Court House, } *Prescription Druggist.*  
SALEM.

Prize circular composed by Ralph Gable, of Salem, N. J.

In this way I would keep up a constant talk with the public; every day, if there were a daily newspaper; every week, if a weekly; and thus create confidence in my store, by showing the public that I thoroughly knew my business, and was following it closely and faithfully.

Like a physician, a druggist needs to get the respect and confidence of the people, and without these his business can never be large. But if he shows every day in his talks with his customers that he understands his business, and is constantly at the helm, he will soon get confidence, customers and friends.

If placards were to be used, I would print them on oblong sheets or streamers for dead walls and cards for windows; not making posters, but small sized sheets, not to be viewed afar off, but to be read near by.

I would also adopt another plan, as follows: I would distribute about holiday time each year, a few handsome and valuable presents in the following way: On the first day of January, each year, I would place in a handsome case, in a conspicuous place in my store, say, \$100 worth of fine toilet articles, handsome and rich, from a mere bottle of perfume to a silver toilet set. I would lock the case and place inside of it a card to read something as follows:

These are our annual souvenir articles which will be presented on January 1, 1894, to the lady customers of this store, in the order of amount purchased here during the year.

I would then provide a salesbook for each clerk, with check to put down the names of articles, amount, and name of each purchaser. Each check should be filed at once, and each day a book record made of each purchase.

I would thus get the advantage of the competition and advertising for the whole year, and get it in an unobtrusive way that would be likely to enlist the competition of the best customers, when something more obtrusive and clearly self seeking and competitive would not do so. The use of cards and checks for the customer to present at each purchase is objectionable, and would not be used by the best people.

#### Feature Advertising.

A number of prominent advertisers have lately introduced regularly into their newspaper advertisements extraneous features which they thought would cause the public to seek for their announcement upon opening the paper. A Chicago dry goods house, for instance, have a regular space in several of the morning papers, and each morning, beneath the name of the firm which headed the advertisement, but before the description of goods, appeared, under the caption "What is going on to-day," a list of the various society events, association meetings, private entertainments and such occurrences as are not generally grouped together in a daily paper. A prominent soap manufacturing concern is attracting a great deal of attention by a series of bright cartoons on timely topics, mostly of a local character, in the advertising columns of the daily papers. The cartoons are accompanied by brief and witty descriptions which, of course, make mention of some of the merits of the firm's especial brands of soap before the end. Both of these methods have much to commend them.

In New York City a cutting druggist heads his advertisement with a small outline cut referring to some event of general interest occurring on that day, as the yacht race, a foot ball game, a political convention, etc.

Merchants in small towns and cities may find the following plan a good one, especially for use in weekly papers. Each week besides your regular display advertisement compose a bright conundrum, the answer to which shall refer to your business or the goods which you handle. Have the editor insert the query in his local notes, and state that the answer will be found in your regular advertisement in the same issue. The answer should appear in small type above the first line of the display "ad." If this is made a regular feature and the conundrums are sufficiently bright and witty, they cannot fail to make your advertisement sought after.

# COLUMBIAN EXPOSITION

## Manufactures Building.

(Continued from page 230.)

The exhibit of the Upjohn Pill & Granule Co., of Kalamazoo, Mich., consists of a mahogany case in hexagonal sections, twelve feet high, filled with friable pills and granules. In one compartment are shown 3,500,000 two-grain quinine pills, requiring 1,000 pounds of quinine sulphate for their production.

The J. C. Ayer Co., of Lowell, Mass., which is the only firm of proprietary medicine dealers having the privilege of exhibiting proprietaries at the Fair, have a particularly handsome exhibit of their "Ayer's Sarsaparilla," "Cherry Pectoral," etc.

### EXHIBIT OF FAIRCHILD BROS. & FOSTER.

Fairchild Bros. & Foster, of New York, have a handsome pavilion in white and gold, adorned with ornamental brass work. The exhibit proper contains the various ferments manufactured by this firm. Various preparations of these are displayed, such as peptonizing tubes, essence of pepsin, peptogenic milk powder, diastasic essence of pancreas, panopeptone, etc. These are shown in the packages in which they are placed on the market; many of them are also shown in the large globular and the tall narrow show jars.

The exhibit of the Horlick's Food Co., of Racine, Wis., is located in a little square booth of light oak, with entrances on two sides. On either side are displayed packages of different sizes of the two specialties of the firm—malted milk and infant food. On one side of the booth are suspended two hanging jars, filled with the same substances.

Mellin's Food is displayed in a small booth of ivory-white tint, open at one side only. On the rear wall is a handsome oil

painting of a healthy infant, which is supposed to be indicative of the valuable qualities of the food.

### OTHER EXHIBITS IN THE GALLERY.

A number of exhibits of interest to pharmacists are scattered along the west and north galleries.

In the Russian department, along the west gallery, are exhibits of surgical instruments, models of crystals, and some chemical and physical apparatus.

In the New South Wales department are exhibited a number of drugs, such as

scopes—student and professional, accessories of all kinds, microtomes, turn-tables, lamps, etc. The most interesting of these exhibits is that of Watson, where the new, very serviceable, and complete Van Heurck stand is shown. The attendant at this exhibit thoroughly understands microscopes, and is always ready to impart information. In Beck's exhibit are shown objectives in the various stages of transformation from irregular pieces of glass.

In the Italian section are shown pharmaceutical preparations, chemicals, perfumes, soaps, etc., made by pharmacists in Bologna, Naples, Venice, and elsewhere.

In the Mexican section are shown 200 materia medica specimens in quart bottles, the names and properties being stated in Spanish.

In the German section is shown a large case containing 2,000 specimens of chemicals made by students in the laboratories of various universities and schools in Germany. Those who desire to see a very complete line of scientific apparatus including microscopes, spectroscopes, polariscopes, etc., will find one in the German section.

The Brazil exhibit includes many crude drugs, also pharmaceuticals such as compressed tablets, homœo-

pathic remedies, etc., also books on medicine, sanitation, etc.

The only portion of the Austrian section worthy of interest is the exhibit of the microscopes of C. Reichert & Co., of Vienna, which firm has acquired considerable notoriety within the last year or two.

The case in which the products of the firm are shown is located at the rear of the pavilion and in it are shown impregnated gauzes and cottons, plasters of all kinds in rolls, and in the cut form in boxes, plaster of Paris bandages, ligatures, etc. The firm is using for many of its

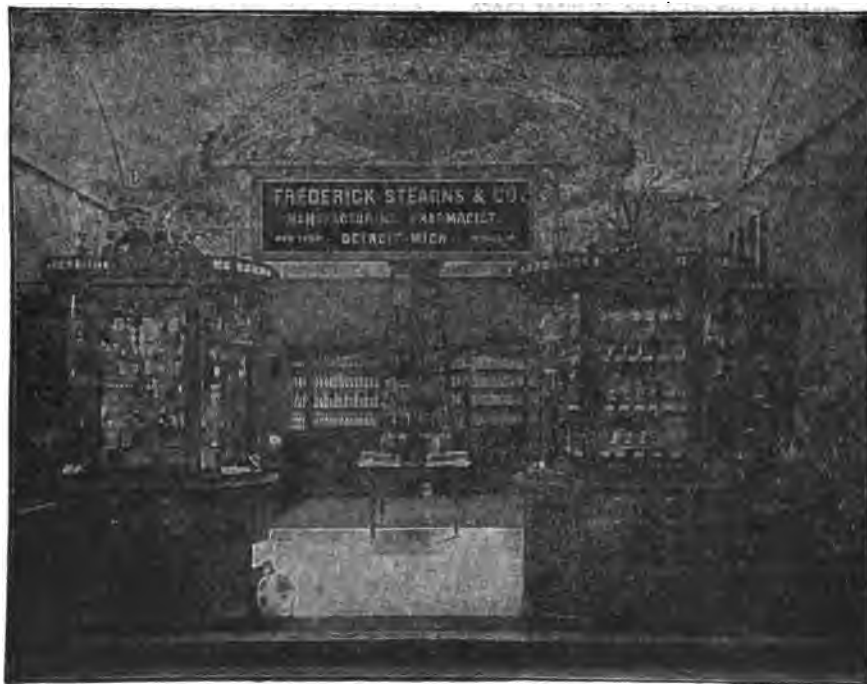


EXHIBIT OF FRED. STEARNS & CO. SEE PAGE 230.

kava kava (piper methysticum), pennyroyal (mentha saturejoides), asthma herb (euphorbia pilulifera), twenty-one different specimens of kino, a number of specimens of wattle gum, Australian fever bark (alstonia constricta), and pituri (duboisia hopwoodii), the botanical name here given being the same as on the containers.

The only exhibits in the British section of interest to pharmacists are the microscopical displays, three firms exhibiting: R. & J. Beck, F. Darton & Co., and W. Watson & Sons, all of London. All these exhibits are installed in tall ebony cases, and consist of various styles of micro-

goods a new style of container which is entirely impervious to air and its deteriorating constituents and which combines with this the advantage of extreme lightness.

The exhibit of Johnson & Johnson is installed in several tall ebonized cases filled with cottons, gauzes, plaster, etc. At the rear of the cases is a model of the room where surgical dressings are prepared. A copper-lined cupboard where the dressings are sterilized by heat is shown, also the glass tables on which they are rolled and cut, and the girl operatives at work; the room is lighted with tiny incandescent lamps. The manner of extracting blood, fat, etc., from ligatures previous to impregnation is shown in this exhibit.

Along the north galleries are located the exhibits of book publishers, antiseptic goods manufacturers, and the makers of surgical appliances and of microscopes and accessories.

The medical book publishers who are exhibiting are the W. T. Keener Co., of Chicago; Wm. Wood & Co., of New York; the J. B. Lippincott Co., of Philadelphia, and the F. A. Davis Co., of Philadelphia. Their exhibits contain a few works bearing directly upon pharmacy.

Among the manufacturers of antiseptic goods who are exhibiting are Seabury & Johnson, and Johnson & Johnson, of New York; the T. W. Heinemann Co., of Chicago, and the J. Elwood Lee Co., of Conshohocken, Pa. The handsomest is that of Seabury & Johnson (see page 261). It occupies a space of about fifteen by twenty feet and is surrounded by white railings of the Ionic order; the floor is covered with a handsome blue Wilton rug upon which is placed a smaller rug of white fur. In the front of the pavilion is a small case surmounted by a bronze figure of Mercury, and in the case itself are shown the various medals received by the firm.

The firms exhibiting microscopes and accessories are the Bausch & Lomb Optical Co., of Rochester, N. Y.; Queen & Co., of Philadelphia; the Gundlach Optical Co., of Rochester, and the McIntosh Battery & Optical Co., of Chicago. The Bausch & Lomb Optical Co. shows different styles of microscopes, various kinds of lenses and section of these, pieces of glass of all colors, prisms, etc. The exhibits of the other firms partake of the same general character. Queen & Co., in addition, show considerable chemical and physical apparatus and also a considerable line of chemicals.

In the northeast section of the gallery is the large exhibit of cash registers which will interest all men of business. The mechanical construction and the action of the self-adding register are here shown.

#### Department of Manufacturers. UNITED STATES SECTION.

A number of exhibits of interest to pharmacists are located in this section. In the farther northeast corner, for instance, are the exhibits of the soda apparatus manufacturers, and include all the prominent firms of the country, viz., J. W. Tufts, of Boston; A. D. Puffer & Sons, of Boston; the John Matthews Apparatus Co., of New York; Chas. Lippincott & Co., of Philadelphia; Low's Art Tile Co., of Chelsea, Mass., and Otto Zwietsch, of Milwaukee.

#### EXHIBIT OF J. W. TUFTS.

J. W. Tufts has three fountains on exhibition, one of which was made expressly for the Exposition and occupies a promi-

nent position facing the aisle. It is eight feet long and ten feet high and is provided with eleven draft tubes and 28 syrup jars. The body of the apparatus is constructed of Mexican onyx of greenish hue, some of the pieces being very large and quite translucent. Immediately above the draft tubes are two massive globes painted in transparent colors and are mounted on groups of cherubs; within the globes are incandescent lamps for illumination of the apparatus. The top is of wood finished in ivory and gold, is supported by three ornamental pillars, is provided with two large mirrors situated behind the globes, and above all is a balustrade containing a very fine eight-day clock. A second fountain is of American art tile with a top of German wicker work, while the third is constructed mostly of black Belgian marble relieved by Gryotte marble. A tumbler washer, a hot soda apparatus of art tile, and a silver



EXHIBIT OF J. C. AYER & CO.

urn for cracked or crushed ice are also shown.

#### EXHIBIT OF A. D. PUFFER & SONS.

A. D. Puffer & Sons are represented by seven apparatuses, two of onyx and five of fancy marble. Six of these are from the regular stock, while the seventh has been designed especially for the Exposition. It is constructed of Mexican onyx of a green tint relieved with marble, is eight feet long and ten feet high, and is provided with ten draft arms and 24 syrup jars. The top is supported by artistically-cut square columns of onyx, and has a number of mirrors all encased in select pieces of onyx. The apparatus is illuminated by five incandescent lamps, the central one of which is larger than the others, the whole being supported on a neat candelabra of gold. In addition to the regular soda apparatuses, the firm also shows counter stands for serving soda and mineral water.

#### EXHIBIT OF THE JOHN MATTHEWS APPARATUS CO.

The John Matthews Apparatus Co. is represented by three wall apparatuses. The principal one is made of Mexican and Californian onyxes, the former of a greenish tint, the latter mostly of a yellow; it is twelve feet long and ten feet high, and has twelve draft arms and 30 syrup jars. The top is of wood tinted in ivory and gold, and has three globes for illumination by electricity. The firm also has on exhibition a silver counter stand for soda; at the sides are recesses for the bottles of the syrup, and above all is a water fount (see page 263).

#### EXHIBIT OF CHAS. LIPPINCOTT & CO.

Chas. Lippincott & Co. are represented by five apparatuses, the most important one being an immense apparatus with canopy, which faces the aisle. It is made of a combination of Mexican onyx and Gryotte and Sienna marbles, is twenty feet long and twelve feet high, and has twelve draft arms and thirty-two syrup jars. It is divided into two main bodies, with a grotto in the center, which has a mirror back of it. The top has a large plate-glass mirror extending the entire length of the apparatus, framed in onyx and black and blue marbles. The whole is supported by four columns of Mexican onyx. The canopy which surmounts the whole is made up of onyx and marble, and is supported by six onyx and marble columns resting on a Gryotte marble base. The whole is illuminated by thirty-four incandescent lights, disposed in little recesses in the marble, and covered with cut-glass crystals; in addition, a large incandescent lamp faces the front of the apparatus. Suspended from the canopy are two fans operated by an electric motor.

In addition to the regular apparatuses, there is a counter apparatus of silver, cylindrical in form, above which is a tumbler washer, and over the whole is a water fount.

#### LOW ART TILE EXHIBIT.

The exhibit of the Low Art Tile Co. differs essentially from that of the other firms inasmuch as but one apparatus is shown, and this is the largest one shown and is made almost entirely of art tile. The apparatus is twenty feet long and fourteen feet high and has thirteen draft arms and 48 syrup jars. The tile is of various tints and is ornamented with allegorical figures. Four white Corinthian pillars support the top and divide the body of the apparatus into three compartments. On top of each compartment are allegorical designs symbolizing thirst; on each pillar rests a large white sea shell. Before this apparatus is a long counter stand, the front of which is made of tile; at the end of this stand is a hot soda apparatus made entirely of tile.

(To be continued.)

#### Silurian Mineral Water.

The Silurian Mineral Spring Co., of Waukesha, Wis., have appointed Bell, Pollitz & Co., 2 Platt street, New York, agents for the well known Hungarian Aperient Water, the Hunyadi Lajos and Imported French Vichy Reigrier, as their eastern agents for the famous Silurian mineral waters, ginger ale and wild cherry phosphate. Descriptive circulars of the Silurian Waters can be obtained by directly a postal a postal card to the above address.

# National Wholesale Druggist Association.

## Nineteenth Annual Session, Detroit, 1893.

### FIRST SESSION.

The first session of the nineteenth annual convention of the National Wholesale Druggists' Association was opened at the Cadillac Hotel, Detroit, on Monday October 9, 1893, by President Jas. E. Davis at 8 o'clock P.M., who introduced the Rev. Dr. Wellington W. Carson, who gave utterance to a short prayer invoking the Divine aid in the deliberations of the association. The Comptroller of the City of Detroit was then introduced, and in a few pleasant words bade the association welcome to the city on behalf of the Mayor and its citizens.

The reception of delegates from associations of retailers was proceeded with next, and J. H. Redsecker answered for the Pennsylvania State Pharmaceutical Association. He assured the N. W. D. A. that any action taken by that body with reference to the welfare of the retail druggists would meet with the hearty support of the association which he represented, and expressed the hope that the meeting would prove successful and be productive of good to the trade at large.

J. C. Eliel, of Minneapolis, was called upon to reply for the N. W. D. A., and in the course of an eloquent and carefully considered address told of the great pleasure which it always afforded the association to greet pharmacists upon the floor. He had been a retailer himself and, being familiar with his responsibilities, could speak with knowledge of the good which resulted to the entire wholesale drug trade of the country from efforts made toward the betterment of the retailer's position as a distributor to the public. The welfare of the retailer is the substructure upon which the wholesale druggist must erect the superstructure of his success. Therefore the time and labor expended in the interests of the retailer has its own fruit and is not entirely unselfish, because unless the foundation is strong and solid, we cannot build upon it and have that which we create endure.

The Interstate Retail Druggists' League was represented by Henry Canning, of Boston, Mass., who spoke in general terms of the willingness of the League to farther any work of the N. W. D. A. which might have for its object the more thorough organization of retail druggists in suppressing cutting.

M. Carey Peter of Louisville, responded to the invitation of the president in felicitous terms. "In Kentucky," he said, "the jobbers are on good standing with the retail pharmaceutical association, which is known as the Botanical Club, because they put mint into it."

William A. Hover then extended greetings of the Colorado State Pharmaceutical Association, and after a brief response by Benj. T. Fairchild, who referred to the dominant interests of the State which M. Hover represented, the meeting adjourned until the following morning.

### SECOND SESSION.

The meeting was called to order at 10 A.M.

on Tuesday. President Jas. E. Davis in the chair.

After sundry minor motions had been adjusted he proceeded to read his annual address. In this, which contained an interesting account of the discovery and foundation of Detroit, he made the interesting statement that more tonnage passes annually through the Detroit River than through the Suez Canal or New York Harbor. In recommending that future meetings of the association be held in June, between the 20th and 30th of the month, he brought forward many reasons which must have impressed the members as being sound and weighty. The chief of these was, however, the fact that the Spring rush of business is usually over and the trade can be more readily spared from places of business during that month than in almost any other month of the year. His further recommendation not to



PRESIDENT FRANK A. FAXON.

hold another meeting until June, 1895, unless it is deemed wise to call a meeting within a year was doubtless prompted by the present unsettled condition of trade and the limited period between now and June, 1894. Other recommendations of the president consisted of: An increase in the annual dues from \$10 to \$25; the appointment of a secretary to the Proprietary Committee; a change in the manner of electing the president of the association. Heretofore the president has appointed a committee of five, who name the officers of the association. This power, Mr. Davis thought, should be shifted to the shoulders of the association, and the election of president be made by secret ballot, and not by appointment. He suggested, and his suggestion was adopted, that the discussion on the report of the Proprietary Committee, and the report

of the Retail Protective Committee be made in executive session, and same be kept strictly confidential, except such parts as are considered advisable to publish. The secretary to give out such sections as he shall deem proper. He commented in favorable terms on the recent accessions to membership in the association, and congratulated the Membership Committee on their good work in this direction. Referring to losses in membership from death, he mentioned the following names, which also receive mention in the report of the Committee on Memorials of Deceased Members, viz.: John S. Kirkland, of McKesson & Robbins, New York; Chas. E. Billings, of Billings, Clapp & Co., Boston; Alanson Sheley, of Williams, Davis, Brooks & Co., Detroit; Milton Myers, of Hostetter Co., Pittsburgh, Pa.; John Jacob Thomsen, of John J. Thomsen's Sons, Baltimore; Joseph Bennett, of Mellor & Rittenhouse, Philadelphia; James Richardson, of Richardson Drug Co., St. Louis; Dundas Dick, of Dundas Dick & Co., New York; Henry Spurlock, of Spurlock, Neal & Co., Nashville, Tenn.; John F. Henry, of John F. Henry & Co., New York; Oscar H. Bruen, of Bruen Bros. & Ritchey, New York; Theo. Gerhardt, of Chas. Baumbach Co., Milwaukee.

The president's address was on motion referred to a committee of five appointed by the Chair.

A letter was then read from J. Clifford Richardson, of St. Louis, in which he expressed thanks as a representative of the Richardson family, for the kind expression of sympathy which the association had passed on the occasion of the death of his father, James Richardson, who was the first president of the association. Peter Van Schaack thereupon submitted a preamble and resolution, in which the career of the deceased member was described, and the sorrow of the association at his loss testified to. The preamble and resolution were adopted by a rising vote.

A. B. Merriam, secretary, then presented his annual report a history of the transactions of the association during the interval which elapses between meetings that is always marked by evidences of careful preparation and a thorough regard for the interests of the association which he has served so long and with so much honor. The membership was stated as 427, classified as follows: active, 300; associate, 127. This does not include the honorary list of six, which is now reduced to four by the death of James Richardson and of Gen. J. H. Baxter. In a most exhaustive review of the action taken by the association with respect to the maintenance of prices on proprietary medicines, M. Merriam closed with the following eminently judicial statement of the situation as it is to-day:

The relation of the jobber to the retailer has been so often referred to in the discussions of this body, that it is not necessary to refer to it at any length here. Every plan which has been adopted and proposed to the manufacturer, has proved the mutuality of interest. While other members representing prominent committees have their experience and convictions, I can say for myself, from extended correspondence, that I believe the danger line regarding the safety of the rebate plan is not far removed,

Unless the persistent demands made upon the proprietors for changes in business methods and plans, is abated. I have shown you in another portion of my report that it was a continuous labor of years to secure what was finally achieved, resulting to the advantage of both jobber and retailer. The representative cutter is no longer the humble apothecary, but he is entrenched behind large capital, business ability, and piratical tendency to absorption. To meet his demands, he must find his purveyors as unscrupulous as himself, and the supply is equal to the demand in every quarter. In addition to the \$1,000 advanced by the association in aid of the "Campion" plan, in 1884, there has since been expended by the proprietary committee. . . . and all this largely, in the extension of plans proposed in the interest of the retail trade. Yet, with all this expenditure of money, and the vast amount of labor thrown upon the several committees, the result of these years are before you, and what does it show?

The political philosopher would suggest that the "condition" is still here to "confront us," the "theories" have proven wiles to disappoint and mislead. A modern writer has truly said, "commercial veracity is not only a great virtue but it is a political virtue. The sapper of commercial morals is the man who promises that which he does not fulfill and who helps more than another to destroy the great principle of commercial veracity, which pure and unstained, is the salt of the world of commerce." Until this vital principle of business honor and honesty is thoroughly established in the relations of every member of this Association towards each other, and their obligations to all, it will be as impossible to stop this cutting evil as the flow of the Mississippi.

When we can inject absolute virtue into the veins of every unprincipled jobber and manufacturer and compel the retailers to do a hundredth part of what their representatives in conventions say the 30,000 will do, then we may have a possible hope that something may result to their advantage and our own. I ask your indulgence for the length of this report and for the sentiments spoken I assume individual responsibility.

The report of the treasurer was then presented and referred to an auditing committee.

A. Cressy Morrison, of Milwaukee Wis., who was chairman of the committee on fraternal relations, was next heard from. In originality of scope and breadth of view this report stood out prominently among the different reports presented. He showed evidences of his familiarity with the teachings of Darwin and Lamarck. Mr. Morrison's views with reference to the "basal motives which prompt nineteenth century business organizations," must have come with a feeling of surprise to many of the hard-headed men of business who listened to their enunciation. He told them that:

With the beginning of life in its earliest protoplasmic form, we first discover a tendency to co-operation, in the aggregation of animal forces, which, if from no higher motive than to prey upon each other, are forced into proximity. Slightly above this in the scale of development comes those motives of selfishness and self-protection, which, by some tacit, though perhaps unconscious, agreement, brings fishes into schools, birds into flocks; and, again, the preservation of the race in lower organism makes proximity, hence combination, necessary. Above this comes an animal development of co-operative effort, born of cumulative strength, which undertakes enterprises of acquirement, or war upon other races. For instance, the pack of wolves, who, under an acknowledged leadership, go forth in organized forces in search of food.

In all animal life selfishness and self-preservation are the fundamental reasons for organized co-operative effort. Fraternity is therefore born the weakening of uncontrolled and mere animal, unthinking instinct. The development of species draws into sharply defined lines the limitations of this animal brotherhood, and yet we find creatures of similar species and approximate developments battling with each other, as among ants, where we find all the horrors of civil war.

With the first spark of spirituality and that God-given touch of sublime intelligence, memory, comes gratitude and forethought; and in the early savage races, while the animal qualities still predominate, organization, first in the family—that cradle of fraternity; next in the village, where family fraternity is amalgamated; next in the tribe, where organization first becomes distinctly manifest, and again in the nation, where the ideas of equality, equal rights, patriotism, bravery, chivalry and loyalty are developed, fraternity, I repeat, comes forth in ever increasing prominence. This eternal and ever-present, never-failing necessary brotherhood of man

has prophesied from the earliest beginnings the civilization which we now enjoy.

Beginning with the organization of physicians whose object is the dissemination of knowledge regarding clinical requirements and improved pharmaceuticals and the demand of scientific accuracy and purity both in the drugs and in the prescription when compounded; rising through them to the pharmacist himself, who, realizing the more exacting demand which the brotherhood of physicians is bringing about, organizes for the more thorough and practical fulfillment of the physicians' demands and the interchange of ideas which makes universal all improvements in methods of production and dispensation of drugs. The increased demand for exactness, perfection and elegance which is created by the pharmacist sets into active operation the inventive genius of chemistry and its attendant sciences, and forces the manufacturer to the highest attainment. Between the manufacturer and the retail druggist and sponsor to both exercising almost unlimited power in both directions, stands the wholesale druggist. With him lies in a large measure the responsibility for the purity in drugs, and thus in his hands rests the life or death of the sufferer for whom the physician is prescribing. The magnitude of his duties makes possible the closest attention to details, which would, in the hands of a retail druggist, be neglected, and the necessities of trade make him the check upon the manufacturer. Occupying so high a position and one which so closely affects the life of the nation, the wholesale druggist is fully alive to his responsibilities.

This report was referred to the Board of Control, after which Thomas Lord, of Chicago, presented a lengthy series of Memorials on Deceased Members.

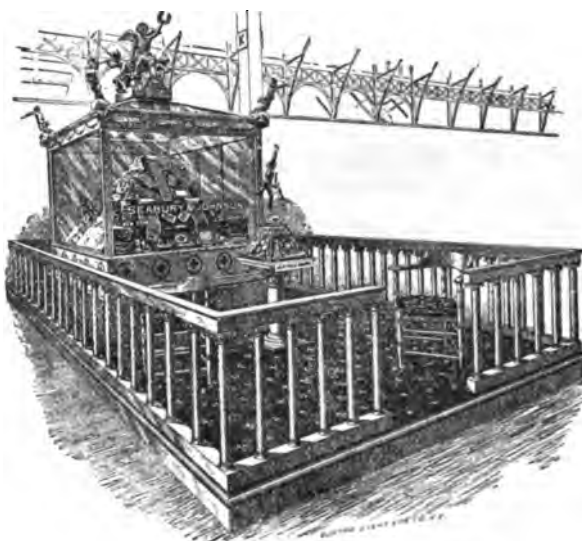


EXHIBIT OF SEABURY & JOHNSON. SEE PAGE 259.

The next committee to report being that on Proprietary Medicines, it was resolved to make it the first order of business for the afternoon session. The meeting then adjourned until 2 30 P.M.

#### THIRD SESSION.

The first business brought before the meeting at this session, which was held on Tuesday at 2.30 P.M., was the report of the Committee on Proprietary Goods, presented by its chairman, M. N. Kline. The causes which led to the failure of the different plans heretofore devised for the protection of retailers and the general control of supplies were fully outlined.

#### THE DETROIT PLAN.

Referring to the so-called "Detroit Plan" he reviewed its history, and said that early in the present year it became so plainly evident to the members of the committee that some steps would have to be taken to check the disintegrating process, that a meeting was decided upon, and this was held this year in Detroit on May 24 and 25. This meeting was attended by the president of the association and fourteen mem-

bers of the committee, also by delegates from the Southern and Western Wholesale Druggists' Association. After a very full discussion, in which all the members present participated, it was voted as the almost unanimous sense of the committee that the following plan, which has since been known as the "Detroit Plan," should be recommended to proprietors as most likely to correct existing abuses.

*Whereas*, All plans to prevent the cutters from obtaining their supplies have thus far been unsuccessful.

*Whereas*, In our opinion all such plans will be unsuccessful as long as there are retailers who can buy direct from the manufacturer, and who may supply the cutter;

*Whereas*, It is manifestly to the retailer's interest to be placed on precisely the same footing in his purchases as the cutter, and as this can only be secured by insisting upon uniform cost to all classes of retailers;

*Resolved*, That we recommend the following plan to the manufacturer, and urge its adoption:

The manufacturer to sell at a discount only to those doing a strictly jobbing trade; the said jobbers to be defined by a committee appointed by the different local organizations of wholesale druggists, who will furnish lists of those who may properly be considered jobbers in their territory to the Proprietary Committee of the N. W. D. A., who shall furnish a complete list for the U. S. to the proprietors and wholesale dealers. We recommend an intermediate quantity for the retailers, not exceeding \$25, to be sold at a discount not larger than 3 per cent.; the jobbers not to sell to anyone not in the list of jobbers at better than 3 per cent. To anyone in the list of jobbers any jobber may sell at the manufacturers intermediate quantity price.

The closing paragraphs of the committee's report dealt with the financial difficulties in the way of successfully coping with the cutter or of cutting off his base of supplies.

#### THE REBATE SYSTEM.

With reference to the much discussed "rebate system" the committee presented the following conclusions:

In conclusion, we deem it useless to advance any arguments in favor of the rebate system. These were necessary at the time of its introduction ten or more years ago, but the justice of the demand by the wholesale distributor for a fair remuneration provided by this system, then conceded by the manufacturers, has never since been questioned, but on the contrary has constantly brought to its support a rapidly increasing number of advocates, the latest and probably the most notable being the Publishing Committee of the recently revised U. S. Pharmacopoeia. This being so, it is manifestly our duty to concentrate our efforts upon devising improved methods for its stricter enforcement, a more loyal support by our members of its conditions and a more active and united determination to defeat the dishonorable machinations of its comparatively few open enemies. This duty plainly lies along the lines indicated in the "Detroit plan."

The report of the Committee on Legislation was then taken up. The report was read by the Chairman, Benj. T. Fairchild. In it reference was made to the successful opposition inaugurated by the N. W. D. A. against the passage of the Paddock Bill. Other proposed measures opposed by the association and mentioned in Mr. Fairchild's report were: the Scott Bill providing for an increase of the Internal Revenue Tax on Alcohol; the Anti-option Bill and the different bills introduced in the legislatures of New York, Pennsylvania and Illinois all looking to the regulation of the sale and manufacture of patent medicines. The provisions of the substitute proposed for the "Hall Trade Mark Bill" were given in detail and recommended for the support of the association.

The Sherman Act received attention in the following resolution, which was adopted by a unanimous vote:

*Resolved*, The National Wholesale Druggists' Association of the United States, in convention now assembled, do respectfully petition the Senate of the United States to immediately repeal the purchase

clause of the Sherman Act, believing that this action is essential to the financial prosperity of this country, and believing that such action should be antecedent to further discussion of future financial measures.

After the transaction of routine business, and the reading of other committee reports, the meeting adjourned to Wednesday, at 10 A.M.

#### FOURTH SESSION.

The American Pharmaceutical Association was represented at this session by W. Bodemann, of Chicago, who introduced himself as follows:

"Mr. President and Gentlemen: When Jim Corbett and John L. Sullivan met, before they started the fight, they had a shake. I extend to you all the hearty shake of the A. P. A., and when time is called we shall have a hearty shake again. I am very pleased to meet you."

The Board of Control here presented their report on the president's address. The complete report reads as follows:

In order to enable the association to do more effective work and to provide for the expenses attendant upon the employment of a competent assistant to the Committee on Proprietary Articles, your committee approve of the president's suggestion to increase the annual dues paid by the members from \$10 to \$15 per year, and that Article 9 of the Constitution governing the same be changed to conform to this amount so as to read:

"Twenty-five" in place of "ten" in lines six and seven.

We recommend the adoption of the suggestion to employ a secretary to Proprietary Committee, at a fair salary, and are of the opinion that the employment and direction of such assistant should be in charge of the Committee on Proprietary Articles.

We recommend that the consideration of the change of method of election of officers of the association be postponed for the present.

We concur in the recommendation that the discussion on the report of the Proprietary Committee and report of Retail Protection Association be made in executive session, and same to be kept strictly confidential except such parts as are considered desirable to publish. The Secretary shall furnish for publication only such matters as may be directed by the chairman of the Proprietary Committee.

It is the opinion of your committee that no good reason has been advanced for changing the date of meeting from the month of September to the month of June, and suggest that the time of meeting remain unchanged, particularly as it is a fact that the time of calling the meeting is practically in the hands of the President and Board of Control.

We concur in the president's recommendation in regard to amendment of Article 12 of our Constitution.

Signed by the committee,

JOHN S. MOFFITT,  
JOHN N. CAREY,  
M. C. PETER.

The committee appointed to submit nominations for officers for the ensuing year then presented their report as follows:

**President.**—Frank A. Faxon, Kansas City.

**First Vice-President.**—J. C. Ellet, Minneapolis.

**Second Vice-President.**—Thomas F. Main, New York.

**Third Vice-President.**—John B. Purcell, Richmond.

**Fourth Vice-President.**—John A. Carey, Indianapolis.

**Fifth Vice-President.**—E. C. Frisbie, Hartford.

**Secretary.**—A. B. Merriam, Minneapolis.

**Treasurer.**—S. M. Strong, Cleveland.

**Board of Control.**—C. F. Weller, Omaha; J. A. Gillman, Boston; J. S. Moffitt, St. Louis; A. S. Brooks, Detroit; B. T. Fairchild, New York.

The Board of Control at this point reported back through Mr. Peters on the suggestions contained in the report of the Committee on Proprietary Preparations. The majority of the suggestions or recommendations made were approved of, and the committee strengthened by other resolutions providing for the better conduct of business between wholesale and retail dealers. The report of the joint committee of the N. W. D. A. and A. M. W. D. P. A. was next presented by R. V. Pierce. The full text of the report embodying the resolutions of the committee is appended herewith:

#### REPORT OF JOINT COMMITTEE.

Report of the special committee appointed to



EXHIBIT OF J. ELWOOD LEE & CO. SEE PAGE 259.

confer with the committee of the A. M. W. D. P. A. on the "Detroit plan."

To the Association of Manufacturers and Wholesale Dealers in Proprietary Articles:

Gentlemen: Your committee beg leave to report the following resolutions as agreed upon by the joint committee and already indorsed by the N. W. D. A.

**Resolved, First,** that the contract plan is the only practical method for the maintenance of fair and legitimate schedules for prices of proprietary articles.

**Second.**—That in order to strengthen and render this plan more effective, it is respectfully recommended that proprietors accept orders for full quantities, with rebate discount only from regular houses recognized as belonging to the number who will faithfully observe the prices and conditions established by the manufacturers.

**Third.**—That in the opinion of the joint committee the forms for price lists herewith submitted, embody in the main, features which would tend to give stability to the plan, and they are commended to the favorable consideration of proprietors. The committee consider it desirable that as far as practicable proprietors generally, adopt uniform or similar forms of price lists.

**Fourth.**—We recommend that proprietors be requested to furnish to the chairman of the Committee on Proprietary Articles of the National Wholesale Druggists' Association, and the Committee on Trade Interests of the association of manufacturers and

wholesale dealers in proprietary articles, full lists of their customers with the understanding that in cases where it is proven that contracts have been violated they shall be refused further supplies. Also that in case of receiving orders from others their names shall be submitted to the chairman of same committees for approval before filling them.

The chairman explained that the foregoing embodied the resolutions. The forms for price lists or instructions to wholesale agents, if they may be so called, and the blank form for acceptance of the agency tendered are as follows:

Office of.....(date).....

"Gentlemen—We have this [day] established a selling price for our preparations, as per inclosed price list.

"We shall be pleased to have you act as our selling agents and will make shipments on conditions and terms as below stated.

"On receipt of your acceptance of our selling agency for which we herewith inclose blank form for your signature, we will forward you such quantities as you may desire, in lots of not less than \$.....

"In consideration of your maintaining our selling prices and complying with all the regulations herein mentioned, we will allow you a commission of . . . per cent. on our selling prices, provided that the net amount is remitted to us within . . . days from date of each invoice. We will also allow you . . . per cent. for each off net amount if remitted in . . . days from date of shipment.

"We will prepay freight to your railroad depot or wharf, but goods are at your risk after delivery to transportation company. You are not to sell at less than our list prices, but may if you desire, allow your customers not over . . . per cent. for cash in . . . days from date of shipment.

"Our prices shall not be cut by you or your salesmen or agents directly or indirectly. When we can prove that you have wilfully cut our prices we will withdraw our selling agency and notify all other selling agents that no sales shall be made to you except at long prices. We sell only through our selling agents.

"We desire to have retail dealers fully protected in obtaining the regular prices, and all selling agents will refuse to supply all recognized and voluntary cutters of prices of any proprietary articles, whether wholesale or retail dealers.

"Furthermore, whenever the retail trade of any city, town or county have organized a league or association, embracing 80 per cent. of such dealers located in such city, town or county and have established a schedule at which proprietary articles shall be sold by its members, and such facts shall be reported to you, either by such organization or by the undersigned, then you shall not supply our goods to any dealer in such city, town or county who sells proprietary articles in violation of such schedule so established, except at full retail prices.

"We have endeavored to make a plan just and equitable to all regular houses recognized as belonging to the number who will faithfully observe our terms, and will give no other discounts or terms than herein stated, no matter how large the quantity, and assure you that we will adhere strictly to these regulations and require like observance by all our selling agents.

"We believe our efforts in the interest of both jobbers and retailers will be appreciated, and will receive their cordial approval.

"Please let us hear from you promptly. Very respectfully yours,

The proposed price list, the chairman added, is very brief, and simply gives the price of these articles:

#### PRICE LIST.

[John Smith & Co., Lowell, Mass.]

November 1, 1893.

|   |        |
|---|--------|
| Smith's Sarsaparilla, per doz.....                | \$3 00 |
| Smith's Cough Syrup, per doz.....                 | 3 50   |
| Smith's Pills, per doz.....                       | 1 15   |
| 10 per cent. advance on sales of less than dozen. |        |

In \$— lots of one article or assorted as wanted, a discount of 3 per cent. allowed.

We have selling agents in all important towns, who will supply our preparations at above prices. No goods furnished by us except to our selling agents.

JOHN SMITH & Co.  
The amount in the other contract which was considered was named at one hundred dollar lots; it seems to be blank here. The chairman (reading from the price list) "We have selling agents in all important towns who will supply our preparations at above prices."

No goods furnished by us except to our selling agents.

(Signed) \_\_\_\_\_

The form of acceptance is as follows: \_\_\_\_\_

Messrs. \_\_\_\_\_, 1895.

Dear Sir: We hereby accept the selling agency for your preparations on the conditions stated in your circular of November 1, 1893, and pledge you our faith and honor to strictly maintain your selling prices, and faithfully conform to all your conditions. Yours truly,

On motion, duly made and seconded, it was resolved to adopt the report as presented.

The election of officers was next in order, and on motion of Mr. Kline the secretary was asked to cast an affirmative ballot for the officers reported by the Nominating Committee. This was done, and the officers declared duly elected as nominated.

#### FIFTH SESSION.

The meeting was called to order on the morning of Thursday, October 12, at 10 A.M., and the first thing taken up was the report of the Committee on Location.

In the absence of the chairman, Mr. Hubbard stated that the committee had had several meetings and were in favor of New York City. A minority report was presented by Mr. Hoover, of Denver, who read a telegram received on the previous evening from the president of the Denver Chamber of Commerce, in which a cordial invitation was extended to the association to hold their next convention in Denver.

Mr. Kline moved that both reports be laid over under the rules, to be taken up at the proper time.

The president then suggested that the matter of new members should be taken up. He understood that S. M. Burroughs, of London, England, was desirous of joining the association; his name had not been posted the necessary length of time, however, and he was undecided as to what action to take in the premises.

The difficulty was solved by Mr. Moffitt, who moved that the name of Burroughs, Wellcome & Company be added by unanimous consent to the list of associate members. This was afterward amended by Mr. Moffitt to read "Active Members," and the motion was carried.

The secretary here read the list of names for membership.

#### ACTIVE MEMBERS.

B. O. Wilson, (G. C.) Boston, Mass.;

Hass, Baruch & Co., Los Angeles, Cal.  
Sagar Drug Co., Duluth, Minn.  
Cawthon & Colman, Selma, Ala.  
J. L. Hopkins & Co., New York.  
Caldwell Sweet, Bangor, Me.  
F. S. Calhoun & Co., New Haven, Conn.  
Lapp Drug Co., Philadelphia, Pa.  
Burlington Drug Co., Burlington, Vt.  
Hartz, Bahnsen & Co., Rock Island, Ill.  
C. D. Smith Drug Co., St. Joseph, Mo.  
Evans-Gallagher Drug Co., Kansas City, Mo.

Nelson, Baker & Co., Detroit, Mich.  
Hughes, Gueretz, Grasse, France, by E. Marchi, New York.

George E. Taylor, Leadville, Col.  
Alfred H. Williams & Co., Utica, N. Y.  
The Payne Drug Co., Rochester, N. Y.  
E. H. Davis & Co., Rochester, N. Y.  
W. Cushing & Co., Foxcroft, Me.  
Cheney Medicine Co., Toledo, Ohio.  
Farland, Williams & Clark, Detroit, Mich.

H. D. Cushman, Three Rivers, Mich.  
Edward Hills, Son & Co., New York.  
Emerson Drug Co., Baltimore, Md.

Intelligence was received at this juncture of the death of John McKesson, Sr., and on motion made by Mr. Van Schaack, the following resolution was adopted by a rising vote:

*Whereas*, This association has just received the melancholy intelligence of the death of Mr. John McKesson, Sr., of New York, a member of this association for many years, and whose name has been prominently and honorably associated with the wholesale drug business of this country for over half a century.

*Resolved*, That this association desires to accord their high appreciation of Mr. McKesson's long and honorable career as a merchant, and to express their sincere sympathy with his family and associates in the loss they have sustained.

*Resolved*, That an official copy of this resolution be forwarded to his family by this association.

After the reception of sundry reports the matter of location of next place of meeting was taken up and a motion to meet in New York City was adopted. In giving his reasons for favoring the selection of New York, President-elect Faxon expressed himself as follows:

All roads lead to New York, Mr. President; next year we will have a large meeting there, and that is what we want. Later on the West is going to get back into its old-fashioned manner of taking rapid strides, and then we want you there. I do certainly believe that it would be better for this association to hold its next meeting in the city of New York. We know something of the hospitality of New York; this association has met there once before.

The installation of officers followed next, and as this concluded the proceedings, the association adjourned subject to the call of the president.

#### Mr. Hart Replies to Dr. Hammond.

We are in receipt of the following communication from Mr. Ernest Hart, editor of the *British Medical Journal*, referring to the letter of Dr. Hammond, extracts from which were published in the

DRUGGIST AND RECORD for September 28.

My respect for and my sympathy with the medical profession in America, and my knowledge of their sentiments, forbid me to regard Dr. William A. Hammond as their representative in the defense which he puts forward in the columns of the *New York Medical Journal*, September 16, of the practices of publicity hunting, by newspaper interviews, newspaper portraits, and of the use of and traffic in secret preparations, etc. I have in the course of recent travel received personally from many hundreds of prominent and representative physicians in Milwaukee, Washington, Boston, Philadelphia, Chicago, Cincinnati, Detroit, and from all parts of the United States, their cordial congratulations on the tone and substance of the addresses which I had the honor to deliver at Milwaukee and Washington. I have been assured on

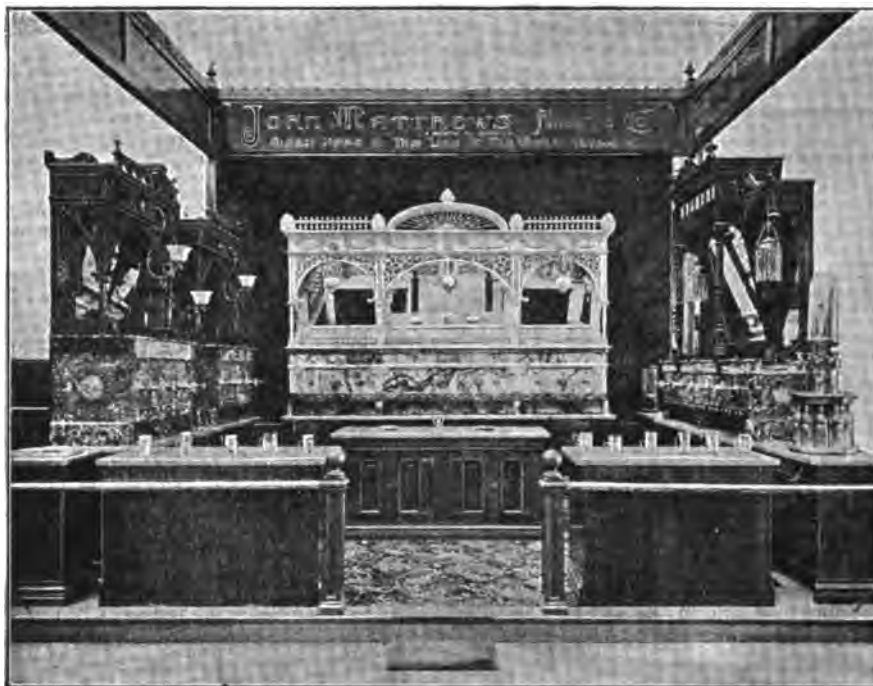


EXHIBIT OF JOHN MATTHEWS APPARATUS CO. SEE PAGE 259.

W. H. Hill & Co., Detroit, Mich.  
McClure, Walker & Gibson, Albany, N. Y.  
C. S. Dent & Co., Detroit, Mich.;  
Burroughs, Wellcome & Co., London, Eng.

#### ASSOCIATE MEMBERS.

Acme White Lead & Color Works, Detroit, Mich.  
Detroit White Lead Works, Detroit, Mich.  
Henry W. Goodwin, Boston, Mass.  
Standford's Vina Vineyard, Vina, Cal., by Byron E. Veatch, Chicago.  
Marlon Flint Glass Co., Marion, Ind.  
S. H. Lutkins, New York City.  
W. B. Burke, Philadelphia, Pa.  
W. F. Ware, Philadelphia, Pa.  
National Capsule Co., Indianapolis, Ind.  
*Druggists Circular*, New York.  
Dr. S. Tuttle, Boston, Mass.

On motion of Mr. Kline the new members were elected by an affirmative ballot cast by the secretary.

all hands of the entire sympathy of the great body of the profession in the views therein laid down and discussed. I should have been surprised, however, and perhaps disappointed if they had not elicited some expression of pain and anger from certain quarters. "Let the galled jade wince, the withers" of the great American medical profession are, I am assured, "unwrung." Your correspondent, in an excess of ethical agnosticism, assumes that the enumeration of ethical data as to medical conduct was, or could be, a reproof direct or implied to the medical profession of America. That is an unmerited insult which he addresses to his profession, and indicates a view which I apprehend to be special to himself. Let him enjoy the practices which he defends; I do not think he is likely to find much support, or sympathy in them from medical men in good standing. His account of the position of the medical men in Great Britain is a parody undeserving of serious notice. So, as to myself, whom he favors with some personal abuse, I have been avowedly the scientific adviser to, but it is untrue that I have ever held any of the stock of the Apollinaris Water Co. As to his other trivialities, I was the guest of the Pan-American Medical Congress, and on entering its headquarters I registered in ceremonious form.

I have no desire to be honored among "the Pan-Anglicans," "the Loyal Legion," the "Fat Men of America," and the other objects of lay interest with whom Dr. Hammond puts medical men on a par, and I do not agree with him that medical men should desire to share with them the honor of newspaper notoriety. I do not believe any details of my medical career have ever appeared in any lay paper.

I suggest that it might be desirable for Dr. Hammond to rely less upon his imagination for his facts, and not to assume to speak for a profession from which he has no sort of mandate, and which would, I am well assured, repudiate, if consulted, both his advocacy and his methods of action and of expression.

I am assured that he utterly misrepresents that profession both in his statement of principles which he ascribes to it, and in his abuse of myself. I am, sir,

Yours faithfully,

ERNEST HART.

### The Alcohol Duty in France.

M. Poirrier, the well-known chemical manufacturer and senator, has invited the Syndical Chamber of Paris Chemical Manufacturers to make an effort, if not to obtain the suppression of the tax on alcohols used for industrial purposes, at least to prevent its proposed increase. The Chamber has readily taken the matter up, and an address has been sent to the French Minister of Finance showing that, even under existing circumstances, competition with other countries is well-nigh impossible for pharmaceutical preparations, chemicals, etc., in which alcohol is used. The tax is at present 37f. 50c. per hundred liters, and it is proposed to raise it to 50f., or 50c. per liter.

It is very improbable that the tax will be suppressed entirely, and the best French manufacturers can hope for is that the old rate will be maintained.

### Senkintan or Thousand Gold Medicine.

One of the most popular nostrums of Japan, and one which has made its proprietor a wealthy man, is Senkintan or "thousand gold medicine," which is made at Tokio by a quack named Nobuyama, of Osaka, who is a thorough believer in advertising, which he does in a rather unique manner. He has in his employ hundreds of young men each of whom wears a uniform consisting of a handsome coat, an oiled paper cloak, leggings, high clogs and an umbrella bearing the trademark of the manufacturer, two circles interlaced. The supplies of each of these peddlers are carried in a small portmanteau also decorated with the interlaced circles. Each peddler carries with him several dozen packages of the *Senkintan*, or "thousand gold" medicine" as its name, literally translated, would read.

The medicine itself is said to contain starch, catechu, thuja (*arbor vitæ*), liquorice, elecampane, camphor, peppermint, cloves. It is made into little cakes, covered with tin-foil and each cake is divided into 20 portions, each portion being a dose. Minute directions accompany each dose, the medicine being used both externally and internally.



The accompanying illustration shows the label on each package, which may be translated as follows:

|                       |            |                 |
|-----------------------|------------|-----------------|
| Sumi                  | Trade Mark |                 |
| Naga                  |            |                 |
| [Maker's Name]        | Sen        | Guwan So        |
| Qual                  | [Thousand] | [Founder]       |
| [Made at]             |            | [Made in Tokio] |
| Stuin                 | Kin        |                 |
| [Factory]             | [Gold]     |                 |
| Do                    |            |                 |
| [of returning spring] | Tan        |                 |
| Saie                  | [Medicine] |                 |
| [Manufactured]        |            |                 |

These peddlers travel on foot all over the Empire of Japan in couples, chanting as they walk the virtues of their medicine as follows: "Ah! Patent thousand gold medicine, the secret of which Nobuyama of Adzuchi street, Osaka, has inherited. Ah! these are the properties of this medicine! Ah! it makes the stomach and the spleen strong! Ah! it is excellent for hoarseness and colds, pyrosis and the result of eating decayed food! Ah! It cures headache, giddiness and dizziness on awakening and is valuable for children's diseases!"

### Mexican Vanilla.

The vanilla plant belongs to the orchid family, has a pulpy stem which grows to several yards in length, attaches itself to trees, and appears to be little dependent on the soil for nourishment. The leaves are lanceolate and pulpy, and the yellow flowers bud from the axilla formed by the leaves with the stem. The fruit is a pod from six to twelve inches long, and about half an inch in diameter at its thickest part, tapering down toward the stem, curved in its entire length, dark green in its earlier stages, and yellow when fully ripe. It is filled with minute black seeds, somewhat resembling iron filings. When prepared for market, the pod becomes reduced to about a quarter of its original thickness, is black in color, and, it is needless to say, emits a very agreeable perfume. Six varieties of vanilla are known in Mexico, says an exchange, namely, the *mansa*, the *cimarrona*, the *mestiza*, the *pompona*, the *puerco* and the *mono*.

There is yet another vanilla, called the *larro* or bamboo vanilla, which is considered by many as a distinct species, but is really nothing else than the *manso* grown in the *larrales* or bamboo thickets in the depths of the virgin forests, where it does not receive a sufficiency of sun and air, and produces a pod thinner and longer than the ordinary *mansa*. The vanilla buyers formerly divided the prepared bean into four classes, namely:

1.—The beans or pods from six and a half inches long and upward, short in the neck or stalk, sound and black; the beans which become split or open, provided they have the foregoing qualities, and the split does not extend more than a third of the pod. This class was again subdivided into *terciada*, which is composed of the shortest pods; *primera chica*, which contains the next in size; *primera grande*, the next; *marca menor*, the next; and *marca mayor*, the largest of all.

2.—Those pods which differ from the *terciada* only in being shorter, two of them counting as one of the first class.

3.—*Zacate*, or the pods of all sizes which are imperfect through being gathered before becoming properly ripe, or being over-cured; *pescosuda*, *vana*, *cueruda* and *apocoyonada*, all names for pods in a more or less damaged condition; and *cimarrona* or wild vanilla in good or fair condition, three pods counting as one of the first class.

4.—The *resacate*, composed of the very short pods; of those split clear up to the stalk; of the badly managed; of the very immature; and of the very much over-cured, which resembles a piece of wood. In this fourth class, six pods counted as one of the first class. The quantity of this and of the second class was always very limited. At the present day, the only distinction made is between the best class and the *cimarrona* and *resacate*, the two last being sold at a very much lower price than the former. Both buying and selling are carried on by count.—*American Grocer*.

Joseph F. Geisler, Ph.C., an alumnus of the University of Michigan who has gained a reputation in recent years as an analytical chemist, and is now chemist to the New York Mercantile Exchange and other public bureaus in this city, was married on Wednesday, October 18, to Miss Ida Mueller, of New York City.

## With the Advertisers.

### A Perfectly Digested Peptone.

Studious, well directed, careful investigation by brilliant minds spreading over a long term of years and confined to a single subject may be reckoned as certain of producing valuable results. This is the method pursued by Fairchild Bros. & Foster in perfecting their digestive products. Commencing with pepsin they have gradually included preparations of all the animal digestive ferments among the products of their laboratory, and the latest product of that laboratory is panopepton, as the name implies, is a perfectly digested peptone, and unlike other predigested foods it is palatable. Write Fairchild Bros. & Foster, 82 Fulton street, New York City, for literature concerning its mentioning the DRUGGIST AND RECORD.

### Druggists Sundries Specialties.

Artificial limbs, trusses, elastic stockings, crutches, rubber goods and surgical instruments are now kept and displayed by a large number of druggists throughout the country, and many firms making these articles appeal especially to the drug trade as a medium of distribution to the public. Among the prominent manufacturers of these articles whose advertisement will be found in the pages of this journal is George R. Fuller, Rochester, N. Y. Mr. Fuller will be glad to supply a catalogue containing particulars of the goods of his manufacture to any druggist making the request and mentioning this paper.

### Elegant Pharmacy.

The name of Wyeth is intimately associated with the triumphs of American "elegant pharmacy," an elegance that controverts all the antiquated notions that therapeutic value increases in proportion with disagreeableness. Write Wyeth & Bro., Philadelphia, for their new catalogue, which excellent exponent of elegant pharmacy will be sent free if the DRUGGIST AND RECORD is mentioned when writing.

### Burnham's Clam Bouillon.

The season is approaching when hot drinks will again find place at the soda fountain. Among the more popular of these beverages by reason of its nutritive and stimulating qualities is Burnham's clam bouillon. There are other reasons why this preparation should find favor with both druggists and the public. Unlike many of the preserved substances of its kind Burnham's clam bouillon is not put up in cans of tin or other metal but is sent out in clear glass bottles, which affords perhaps the very best method of exhibiting goods of this kind. Burnham's clam bouillon can be ordered either direct from the E. S. Burnham Company, 120 Gansevoort street, New York, or through any jobbing druggist.

### Pharmacists and the Sale of Vaccine Lymph.

Pharmacists who are naturally looked to by physicians for the supply of pure vaccine virus would do well, in the present period of activity against the infection of smallpox, to take steps toward securing an agency for the sale of a reliable animal vaccine lymph. This can be done by writing to the New England Vaccine Co., of Chelsea Station, Boston, Mass., whose advertisement will be found on the cover page of this issue.

### An Improvement in Syringes.

The "Big Four" syringe made by Walter F. Ware, 70 North Third street, Philadelphia, has some points about it which are worthy of especial attention. These are:

1st. The stopper will fit any ordinary prescription vial, from two to six ounces, and can be carried in the bottle; handy to use at a moment's notice and obviate the necessity of carrying three articles, *vis.* bottle, syringe and vessel, to pour the liquid in to fill the syringe from.

2d. The stopper slides on the barrel and may be placed at any position to fit a long or short bottle.

3d. There is a soft rubber, cone-shaped tip that cannot strike the sore part or injure in any way, and being soft rubber, can do no injury if it should touch the sore part.

4th. There is a soft rubber packing that takes up but little space in the syringe, and being soft and flexible fits itself to any irregularities of the barrel, and is positively tight and works perfectly at all times.

5th. The handle is made of French jet and is stronger than glass, and will not break when carried in the pocket.

In addition these syringes are sold at such a moderate price that every enterprising dispenser will see the great advantage of sending one out with every injection dispensed.

When writing Mr. Ware for quotations don't fail to mention this journal.

### Glass Labeled Bottles Free.

With the first order for 25 pint bottles of their fluid extracts Smith, Kline & French Co. will give free 25 glass labeled stock bottles. They do this because they are convinced that when once the dispenser learns by actual personal observation the excellence of their make thereafter he will buy only Smith, Kline & French Co.'s make. This is a very liberal offer, and in taking advantage of it our readers should mention the DRUGGIST AND RECORD

### Effective Advertising.

Very many of our readers will have doubtless observed the striking advertisement which makers of the Arnold Steam and Rochester sterilizers display in the different issues of this journal. "It's a little sister at the White House," it begins, and suggests the need of "Another Sterilizer." They make two—the "Arnold," which is referred to as the "Best in the World," the point made for the latter being the fact that it is a cheaper apparatus. Wilmot Castle & Co., Rochester, N. Y., who are the makers of these instruments, are offering special inducements to druggists and invite correspondence on the subject.

### Unanswerable Demonstration.

We have received and read a publication recently issued by the Humphreys' Medicine Co., New York. It contains nearly a thousand testimonials of the efficacy of Humphreys' Specifics.

These testimonials are the unsolicited offerings of those who have experienced and witnessed the wonderful curative effects of these specifics. There are some three hundred from publishers and editors, one hundred from dealers, and others, from every grade of society, and all with one accord tell the same story, the wonderful curative effects of Humphreys' Specifics.

Surely one thing is settled by these testimonials, Humphreys' Specifics do cure. So say the papers. Send to the company for a free copy of "What Dealers Say," mentioning the DRUGGIST AND RECORD.

### Troemner's Scales.

The World's Fair commissioners have just notified Henry Troemner, of Philadelphia, that he was awarded the prize medal for his highly perfected counter scales.

### Encapsulated Medicines.

The modern method of administering disagreeable tasting medicines by means of inclosing the drug in capsules of soft and hard gelatin received perhaps its greatest impetus from the efforts made by Dundas Dick, of New York, to bring a knowledge of its advantages prominently before the notice of physicians. The firm which he established in this city under the name Dundas Dick & Co. have long enjoyed an enviable reputation for uniformity and reliability of product, and their goods are now to be found on sale in all parts of the country. The empty and filled capsules of Dundas Dick & Co. can be procured of any firm of wholesale druggists, or direct from the makers, Dundas Dick & Co., Centre and White streets, New York City. Circulars and price lists giving particulars of the different specialties of the firm can be obtained by any druggist on application at the above address.



### Still Ahead.

The following extract from the Judge's Report of the Columbian Exposition is self explanatory:

11 "Seabury & Johnson's exhibit of medicinal and surgical plasters, antiseptic dressings, etc., has been examined. We find it worthy of an award for the following reasons:

1st "Superior quality of India rubber porous and plain spread medicinal and surgical plasters, a high standard of perfect medication being preserved, a guaranteed percentage of the assayed drug indicated being uniformly present."

2d. "Antiseptic dressings for surgical use, in which an indicated percentage of medication is uniformly present. Such dressings are packed in aseptic containers."

3d. "Reliability, uniformity of, quality, and general excellence."

### A Cure that Cures.

The cure that cures is the cure that sells, because it recommends itself not only to those who have themselves tried it but also to their friends. Raymond & Co., Brooklyn, sell their plasters on this basis. They know that the plasters are efficacious, and offer to send six free to dealers who comply with certain easy conditions. Write them for details.

### Tooth Powder Bottles.

The attention of druggists is invited to the advertisement of John M. Maris & Co., of Philadelphia and New York, which appears in the colored pages of this issue. The tooth powder bottles (styled No. 602) there described have many important advantages over the ordinary container now in use. The chief feature of novelty and merit in the new bottle is found in its construction, which differs entirely from any bottle for similar purposes. The bottom is so constructed as to be entirely open, being fitted with a screw cap of nickel-plated metal. This cap is made with a spring bottom, so that with a touch of the finger or thumb, the powder is readily ejected from the small opening at the top, when required for use. This is an important point since it avoids unnecessary waste of powder so unavoidable with the ordinary styles of powder bottles now in use. Write for prices, mentioning the DRUGGIST AND RECORD.

### The Hot Soda Season.

One of the handsomest and most artistic catalogues of hot soda apparatus yet gotten up has just been gotten out by A. D. Puffer & Sons, of Boston, in the shape of an elegant illustrated 16-page circular. All interested in hot soda should see a copy of this circular which will be forwarded free by A. D. Puffer & Sons to any one who mentions this journal in writing.

### Perfumes.

In quality, style and price, the line of perfumery and toilet articles advertised by Tarrant & Co., in this issue, compare favorably with the best products of the first perfumers of Europe. Dealers who handle these goods, make a satisfactory profit, are always pleased with the neat and attractive appearance of packages and find the articles "ready sellers." As a holiday line they are the best value on the market. Send for price list and terms, addressing Tarrant & Co., Murray and Greenwich streets, New York, mentioning his paper.

### Kefaline-Billroth.

Kefaline-Billroth is claimed to be the most effective analgesic, antipyretic anodyne, anti-congestive or anti-inflammatory preparation yet introduced to the drug trade.

Its sales, according to the proprietors, have been enormous in Paris and in certain parts of our own country. It is unexcelled by even the best of the coal tar derivatives, because, as it is claimed, it is safer, cheaper, and more effective. It is guaranteed to produce all the good effects of the coal tar derivatives and has not one of the possibly bad effects.

It may be well worth the while of every druggist to write the Kefaline Co., Boston, Mass., U. S. A., agents, for further particulars and prices in quantity, particularly such druggists as wish to put up their own headache, neuralgic, rheumatic and such like cures.

### Emerson's Bromo-Seltzer.

The Emerson Drug Co., of Baltimore, Md., are extensively advertising their Bromo-Seltzer in all parts of the country and the demand has already become of satisfactory proportions. The Bromo-Seltzer package is very neat in appearance



and being wonderfully cheap sells without effort. We append herewith a cut showing the general style of package. Druggists will find it to their advantage to write to the Emerson Drug Co. for prices on quantity lots, as the goods can be purchased to greater profit than if prepared by druggists themselves.

### A New Syrup Jar.

The John Matthews Apparatus Co. call attention in our advertising columns to their "Climax" syrup jar, which is claimed to be the only perfect glass syrup jar in the market. The point is made that leakage or breakage does not occur with the "Climax" and its ease in handling is also especially commented upon. The new catalogue of the firm for 1894 is referred to as in press, and copies will be mailed free to any address on request.

### Drug Window Displays.

In the advertising pages of this issue C. H. Bangs, who is widely and favorably known as a maker of drug store fixtures, calls attention to the method of trimming windows adopted by bright business-like druggists. He makes the point that the druggist who wishes his store decoratively furnished should employ the services of an experienced architect, one who has made the subject of drug store fittings a special study. The inference to be drawn is that it will be to the advantage of all druggists to consult C. H. Bangs in the refitting of a drug store. Letters can be addressed to C. H. Bangs at any of the following addresses: New York, 35 Murray street; Boston, 342 Washington street; Philadelphia, 1416 Chestnut street, and Cleveland, 176 Public square.

### The Pan-American Congress visit Frederick Stearns & Co.

The delegates to the Pan-American Medical Congress who visited Detroit recently paid a visit of inspection to a number of the pharmaceutical laboratories for which the city is famed. The extensive laboratory of Frederick Stearns & Co., on Twenty-first St. was visited first. The physicians were conducted through the buildings by the president of the company, Frederick K. Stearns; C. McLaughlin, vice-president of the company; T. Bennett, secretary; W. D. Stearns, superintendent; L. H. Gardner, assistant superintendent; M. Gatell; Spanish correspondent, N. A. Taber, D. M. Gray, and C. C. Sherrard, each one taking a number of the gentlemen in charge.

They visited twenty-four departments including the fluid extract manufacturing room, pomade washers, pharmaceutical manufacturing, capsule room, pill manufacturing room and gelatin coating room, sugar coating room, pill mass cutting room, press room, composing room, and stock room. On the top of each of the doors to the different departments was a large printed card in Spanish describing the department, and the nature of the work performed there. They were provided by a forethought of Mr. Stearns, and as a courtesy to the visitors.

The visitors were much impressed with the completeness of the lines of pharmaceutical products, with the magnitude of the entire establishment, its admirable equipment, the thorough system that was apparent everywhere, and the scrupulous cleanliness of every department. Each of the visitors was presented with two small boxes as mementoes, one containing a bottle of Stearns' rose perfume, and the other samples of pharmaceutical preparations.

They also visited the laboratories of Parke, Davis & Co. and Nelson, Baker & Co., where they were also courteously received and hospitably entertained.

"Meagher's Orange Quinine Wine," prepared by Meagher Bros. & Co., Montreal, is being advertised extensively as "an official preparation." This will no doubt influence many physicians to prescribe the particular brand advertised, but it is somewhat of a liberty to take with the pharmacopeia, the more so as wine of quinine finds no place in its pages.

# American Druggist and Pharmaceutical Record.

A JOURNAL OF PRACTICAL PHARMACY.

VOL. XXIII. No. 18.

NEW YORK, NOVEMBER 2, 1893.

WHOLE No. 271.

## AMERICAN DRUGGIST PUBLISHING COMPANY.

37 COLLEGE PLACE, NEW YORK.

A. R. ELLIOTT, PRESIDENT.

Subscription Price—For the United States and Canada, - \$2.00  
If paid in advance direct to this office, 1.50  
" " for Foreign Countries, - - - 2.50  
Single Copies, - - - - - .15

The "American Druggist and Pharmaceutical Record" is issued on Thursday of each week. Changes of advertisements and all copy for publication should be received before Tuesday of each week.

We are not responsible for any money paid to agents. All remittances should be made direct to this office. Express Orders, Post-Office Orders and Drafts on New York should be made payable to the "American Druggist Publishing Company" and addressed to them at 37 College Place, New York.

*Liberal Commissions to Club Agents.*

**E**LECTROLYTIC purification of water has hitherto proven impracticable because of the generation by electrolysis of oxygen, ozone, hydrogen, hydrogen peroxide, and traces of chlorine, which renders water so treated non-potable, and in fact a vomitive. Obermann, a pharmacist of Schwerin, Mecklenburg, has just patented a process, which, according to Dr. Hager, actually utilizes the gases generated in such a way as to reduce the cost of the process to a very moderate one. Pharmacy is to be congratulated upon having given to the world a process which, if it fulfills its present promise, will be of inestimable hygienic value.

**A**T the Detroit meeting of the N. W. D. A. the charge was made that retail druggists opposed to cutting on patent and proprietary medicines were sometimes responsible for the supplies obtained by firms who make a practice of retailing such goods to the public at or below their cost price. While this may be true as regards a few members of the retail drug trade, the members of the National Wholesale Druggists' Association might, we think, have looked further afield, and taken cognizance of the many other mediums of supply. Is the association prepared to maintain for a moment that the late Economical Drug Company, of Chicago, was dependent upon a retail drug firm in good standing for its supply of the many standard proprietaries which it disposed of at so much of a cut from the regular prices?

**Q**UANTITIES impress the public. A retailer in Philadelphia bought last Fall a barrel of Norwegian cod liver oil instead of his usual five gallon can. He bottled the oil and painting a sign upon the empty barrel mounted it on brackets projecting from the corner of the building so that it would be visible from every direction. He also occasionally filled the window with the bottled oil. As a consequence, he sold six times the quantity of oil which he usually sold, and having bought the barrel of oil cheaper than he could have bought five gallons, he also made a larger profit per gallon. Departures of this kind must not, however, be recklessly made.

**I**T is never a pleasant duty to refer to the mistakes of either pharmacists or physicians; although circumstances occasionally make it necessary to make some comment when the reputation of a fellow pharmacist is assailed. Even then it is not always the best policy to make public the details of a dispute which may have arisen between the physician and the pharmacist. Our reference to the case, the details of which are printed on another page, is prompted by a knowledge of the fact that the physician allowed himself to be quoted in the daily newspapers as saying that the pharmacist who compounded his prescription was in error; the truth of the matter being that both physician and pharmacist were to blame, the burden of the blame lying with the former.

**T**HE pharmacists of Kentucky appear to have the happy knack of combining in excellent proportions and form two features of pharmaceutical gatherings which are generally thought incompatible; but which are, nevertheless, of vital importance to the growth or successful operation of a pharmaceutical association. We speak here of the features of scientific and social interest which form so important a part of the annual gatherings of organized pharmacists.

In the report of the proceedings of the Kentucky Pharmaceutical Association, which has recently been received, we find so many evidences of the good feeling which appears to be cultivated assiduously throughout the State among pharmacists generally, as to warrant us in believing Kentucky pharmacists to be gifted with more than the ordinary quantum of good fellowship and fraternal feeling.

## CARELESS PRESCRIBING.

Physicians are proverbially careless in the writing of prescriptions, and the copy presented below does not lessen the force of this observation. The patient for whom this compound was prescribed was taken ill with all the symptoms of narcotic poisoning after one dose, and the physician when seen by the newspaper reporters expressed himself as follows:

"The difficulty arose through the druggist mistaking the abbreviation 'hyoscyam,' for hyoscyamin, when it was meant for hyoscyamus. The former is the active principle or alkaloid of hyoscyamus (henbane) and is highly poisonous, the maximum dose being one-sixteenth of a grain. The druggist should have read the abbreviation as meaning 'herb hyoscyamus,' which is not nearly so powerful. There were ten doses in the bottle, and that would make the hyoscyamin in the prescription about eight times greater than the maximum dose, one-sixteenth.

This explanation struck the writer as being so very unusually absurd that he decided to call on the physician to ascertain whether or not the latter had been correctly reported, and as might have been expected, he refused to commit himself to a direct statement to the contrary, averring that in previous interviews he

264196 41—  
 10:19:93  
 Hyoscyamin. 0, 3  
 Ag. amygd. amu.  
 10, 0  
 Morph. ace Rec 9, 06  
 Dose 15 drops 3  
 Times a day  
 Dr. White  
 S. Haddamula

had been very greatly misunderstood and misrepresented by other representatives of the press.

It will be plain to every druggist that the true explanation of the error is to be found in the doctor's use of the metric measures. Intending to prescribe 3 centigrammes of the drug he misplaced the decimal point and increased the dose to 3 decigrammes.

It is much more difficult now than formerly for the pharmacist to decide regarding the dangerous nature of a given dose of any poisonous alkaloid. With hyoscyamine in particular there is a wide latitude as to dose. Patients suffering from the delirium of insanity are sometimes given as much as one grain and a half per day in doses of one-half grain each, though the ordinary dose in these cases seldom exceeds one-tenth grain and the average dose of either the crystalline sulphate or amorphous sulphate of hyoscyamine is usually stated as the 1-100th of one grain. Unless, however, the pharmacist is fully certain of the prescriber's intention and aware of the condition of the patient he would do well to consult with the physician

before dispensing remedies of this kind in such heroic doses, and in failing to do this the dispenser in this case laid himself open to censure.

It will be noted that the price paid for the above prescription was fifty cents, this being indicated by the mark 4/- in the upper right hand corner, which by many in the trade will doubtless be considered rather a primitive method for a modern pharmacist to adopt in pricing prescriptions.

## MISCELLANEOUS FORMULAS.

## BATTERY FLUID.

[Dr. A. BERTRAM, *Deutsche Med. Zeit.*]

## I. FOR CONTINUAL IMMERSION BATTERIES.

|                                |                  |
|--------------------------------|------------------|
| Distilled water.....           | 1,000 grammes    |
| Crystallized chromic acid..... | 50 grammes       |
| Sulphuric acid.....            | 50 to 60 grammes |

## II. FOR GALVANO-CAUTERY.

|                                       |             |
|---------------------------------------|-------------|
| Distilled water.....                  | 800 grammes |
| Potassium (or sodium) bichromate..... | 100 grammes |
| Sulphuric acid.....                   | 500 grammes |

## FOR CONSTIPATION.

## I.—[DUJARDIN-BEAUMETZ.]

|                             |         |
|-----------------------------|---------|
| Powdered senna.....         | 6 parts |
| Sublimed sulphur.....       | 6 "     |
| Powdered fennel.....        | 3 "     |
| Powdered aniseed.....       | 3 "     |
| Cream of tartar.....        | 2 "     |
| Powdered licorice-root..... | 8 "     |
| Powdered sugar.....         | 25 "    |

One tablespoonful of this mixture in a half glass of water, between 9 and 10 o'clock in the evening.

## II.—[HUCHARD'S.]

|                                  |                   |
|----------------------------------|-------------------|
| Calcined magnesia (English)..... | 55 grs. (6½ drs.) |
| Cream of tartar.....             | 13 " (3¼ " )      |
| Sodium bicarbonate.....          | 2 " (30 grs.)     |
| Anise-oil sugar.....             | 1 " (15 " )       |

Divide in forty powders. One before every meal

## III.—[FERRAND, FOR CHILDREN.]

|                        |         |
|------------------------|---------|
| R Manna.....           | 5 parts |
| Calcined magnesia..... | 10 "    |
| Sulphur, washed.....   | 10 "    |
| Honey, white.....      | 4 "     |

One or two tablespoonfuls in a cup of warm milk or weak tea.

## IV.—[ANDHOUT'S AROMATIC POWDER.]

|                             |               |
|-----------------------------|---------------|
| Powdered senna.....         | 4 parts       |
| Powdered orange leaves..... | 3 "           |
| Calcined magnesia.....      | 1 " (30 grs.) |
| Powdered anise.....         | 1 " (15 " )   |
| Oil peppermint.....         | 1 " (15 " )   |

Take one or two teaspoonfuls (according to the desired effect) in water, in the evening.

V.—MONOD'S METHOD against obstinate constipation and faecal obstruction, is as follows: The anal sphincter is dilated with Trélat's instrument, the intestine scraped with the finger—a metallic spoon may prove dangerous—and the rectal pouch freed from faecal accumulations. The bowels once moved, normal evacuation can be secured by careful diet and the usual precautions in constipation.—*Am. M. S. Bull.*

## INJECTION FOR GONORRHEA.

[Prof. HORWITZ, *Col. and Clin. Rec.*]

|   |                     |
|---|---------------------|
| Lead acetate.....                             | 30 grains (2 grms.) |
| Zinc sulphate.....                            | 16 " (1 grm.)       |
| Fl. ext. krameria.....                        | 4 fl. drs. (15 Cc.) |
| Tincture opium.....                           | 2 " (7-5 " )        |
| Distilled water, enough to make 6 fl. oz..... | (178 " )            |

Inject three times a day.

## FOR TAPE WORM.

[Dr. A. B. COOKE, *Northwestern Lancet.*]

|  |            |
|--|------------|
| Oleoresin of male fern.....                | 3 fl. drs. |
| Croton oil.....                            | 4 drops    |
| Mucilage of acacia sufficient to make..... | 3 fl. ozs. |

For one dose.

## Western Notes.

C. S. Peters & Co. are remodeling the interior of their drug store at Sioux City, Iowa.

The new drug store of Krehbiel & Bro., in Dayton, Ohio, was entered recently by burglars.

Burglars entered the drug store of A. W. Louise at Denver, Col., and stole \$15 from the cash drawer.

L. McDonald, manager of the Bayfield, Wis., pharmacy, and Miss Jennie Whalen were married recently.

Dr. S. B. Wright has opened a new drug store in the room recently occupied by Dr. Riley, Bloomington, Ill.

Howard Guiney, of Sioux City, has purchased the Rudy stock of drugs and will engage in business at the old stand.

Hatches' drug store at Willow Lake, S. D., was burglarized recently, and also S. Anderson's store whose safe was blown open.

B. Bannister's drug store, opposite the Hotel Vincent, Saginaw, Mich., was entered recently by burglars, the safe opened and \$60 taken.

Kirby Wachtell, head clerk in Bowles & Beamer's drug store, Muncie, Ind., and Miss Mattie A. Baldwin of the same place were recently married.

Mrs. J. L. Lockard has sold the drug store at 70 East Tuscarawas street, Canton, O., to C. B. Rainsberger, who will hereafter conduct the business.

S. B. Cary, the well known druggist of Parsons, Kansas, has moved to the Opera House block and is now enlarging and fitting up handsome quarters.

Dr. R. A. Bunch, a practitioner of several years' standing in Muncie, Ind., and Dr. Bohannon have formed a partnership in that city, both in the practice of medicine and in the drug business.

H. J. Hancock, who has for the past two years been the druggist at the City Hospital, Charleston, S. C., has resigned that position to accept employment as prescription clerk in Dr. D. Vogt's pharmacy.

## Nebraska Notes.

Ed. Perry, a druggist of Nehawka, has been on a visit to his old home in Pawnee City.

J. T. Griffith, of Pawnee City, has just returned from a three weeks' visit to the World's Fair and his old home at Indianapolis, Ind.

The store of A. W. Petee, a druggist at Hickman, was burglarized recently, the thieves securing eleven gold watches, several chains and a tray of jewelry, in all amounting to \$300.

The drug store of E. E. Gray, DuBois, was nearly destroyed by fire recently. While Mr. Gray was extinguishing a large Rochester lamp preparatory to closing, it fell on the floor, and exploding threw burning oil in all directions. Mr. Gray threw an overcoat over the flames, and smothered the blaze with but little damage. Had he thrown water on the blaze, which is naturally the first impulse, the fire would have undoubtedly spread beyond control.

## Prof. Edson S. Bastin.

Professor E. S. Bastin was born of American parents in Wisconsin nearly fifty years ago. During Summer he worked on a farm and in the Winter months attended a district school until about fifteen years of age when he commenced attendance on college at Waukesha. When fairly started in a classical course the war broke out and in his youthful zeal for his country he enlisted, joining the 28th Wisconsin Infantry as a private, and after two years was promoted to a captaincy in the Fourth Arkansas Cavalry, in which capacity he served until the close of the war, when he was honorably discharged with his regiment, in 1865.

Though recommended for West Point by a commission of officers appointed to examine volunteer officers, he preferred civil life and in October, 1865, he went to the University of Chicago to complete the course of study begun before the war and was graduated in 1867. He then took a course of study for the ministry, but by the time he had completed it found that he was not in accord with the doctrines of his church, and therefore, abandoned the idea of entering the ministry. Casting about for something to do, he finally entered a drug store in the outskirts of Chicago where he remained for nearly three years, becoming in the meantime much interested in botany, which he studied assiduously during his leisure hours. As just after the great Chicago fire the prospect for the drug business in Chicago seemed for a time very gloomy, and having a good opportunity to retire from it, he sold his store and soon afterward accepted a position as a teacher.

In March, 1874, he accepted the position of Regu-



PROF. EDSON S. BASTIN, A.M., F.R.S.

lar in the University of Chicago and later was given charge of a class in botany. About two years later he was appointed professor of geology and botany in that institution, a position which he retained until 1883, in which year he resigned, his teachings containing too much of the doctrine of evolution to be in harmony with the institution. Previous to this, in 1887, however, he became the lecturer on botany in the Chicago College of Pharmacy, taking the place of Prof. H. N. Babcock when that gentleman resigned to assume charge of the ill-fated botanical gardens in South Park. His work at the Chicago College of Pharmacy became more prosperous. Besides botany he conducted the chemical laboratory for a while, and then was given the chair of botany and materia medica, and when a microscopical laboratory was started was placed in charge of that also. He remained with this college until the close of the school year of 1890. In the Autumn of the same year he became connected with the North Western University School of Pharmacy where he is at present, in charge of the department of botany and pharmacognosy, lecturing besides on human physiology. Under his charge and arranged according to his plans is a very complete laboratory for work in botany and microscopy. This he had just completed and arranged to his liking when the invitation came to take charge of the department of botany and materia medica in the Philadelphia College of Pharmacy, upon the work of which he will enter November 1.

Besides various articles published in different pharmaceutical and other scientific journals relating to botany and materia medica Professor Bastin is the author of a series of botanies—Bastin's College

Botany, Bastin's Elements of Botany, and Bastin's Vegetable Histology. The first is used in many of the colleges of pharmacy and in many other schools of the country, the second is written for high schools and has been well received. The third is out of print and is now undergoing revision. Besides these he wrote the botany and materia medica lectures for the National Institute of Pharmacy and also part of the pharmacy lectures and those on chemical physics for that course. In fact the botany lectures in this course formed the basis of his more extended and later works on the same subject. Besides his work as a teacher, on which he has always laid great stress, holding that the first duty of a teacher is to teach, his most important work has been in the study of the microscopic structure of drugs, and with the larger opportunities afforded at the Philadelphia College he hopes to accomplish much more in this line. A very able article by Professor Bastin on the starches of root drugs appeared in this journal for September 28th and another on the starches of subterranean stem drugs is printed in the issue for October 26th, page 141.

## Philadelphia Letter.

[From a Staff Correspondent.]

There is an even tenor of way surrounding the pursuit of pharmacy in Philadelphia which shows but little deviation from established methods, and offers but few features of change to note. A tour of the pharmacies, other than those of the frequented centers of business, shows pretty much the same conditions which have always prevailed, with here and there instances of increased activity. The truth is that the pharmacy business is a slow business—but few attain competency—none grow rich. Yet once well established, and the integrity of every thing pertaining to it maintained; it does yield some of the luxuries, a few of the superfluities of life, and a comparatively easy living, so much of the latter, indeed, as to cause one to conclude that it may beget an indolence of effort! The labor of the occupation lies chiefly in the unremitting application—the hewing of wood and the drawing of water is work by comparison.

Notwithstanding the essays, numerous and pertinent, which have appeared in your columns upon the many various methods and expedients to be advantageously employed in extending and prosecuting the business in order to help, if possible, the apothecary out of his occasional despondency, there is much, in many instances, yet to be applied to make particular establishments, having natural advantages, what they should be. One notices, as quite apparent, the perceptible effect of deterioration by "wear and tear;" the axiom of "a stitch in time" finds no application in practice. As fellow druggists we all know that there never should be, under any circumstances, evidences of neglect of surroundings perceptible in any store. The characters and tastes of men are often judged of by their abodes and the conditions of their surroundings. To make the pharmacy a place of character does not involve gaudy or expensive equipment. Those of us familiar with the facts know how inexpensively this class of stores can be outfitted, and yet how neat and chaste, withal. Wood and glass and harmonious coloring are always within moderate reach of money value, and individual taste should be able to supply all that the aesthetic demands.

The above are some of the intruding thoughts suggested to your correspondent's mind in making a tour of the city stores with a view to collecting topics, and material for an acceptable letter. It is a matter of observation that correspondents to our trade journals drift toward personal items, which, no doubt, are at times interesting in their way as local gossip; but this does not compass live, practical, even momentous questions of trade interest which should ever occupy the thoughts of

men, of whom such varied attainments are demanded as of the apothecary—the principles involved in such questions affect this branch of trade over the whole expanse of country, and therefore while they may have a local emanation they have also a general application. It is well known that the science of pharmacy has many able exponents in the Philadelphia ranks. The people, with a just pride, no doubt, boast of the place as a recognized center of learning, and it may be, when the facts are better comprehended, that the representatives of pharmacy here have sought rather to cultivate its science than its commercial opportunities—hence in what pertains to advanced requirements the drug stores of other localities, particularly those of the West, as a rule, far outstrip the Quakers' in artistic elaboration and ornamentation. Material interests cannot be said, however, to have been entirely overlooked, for there exists here a "Trade Association of Druggists" instituted some fifteen years ago which has served useful purposes to the trade. Questions in law, and equity, custom and usage, have been earnestly taken up at times by this body, and successfully championed by a few stanch and devoted members, but your correspondent learns that the body of the trade (and it does seem characteristic) only takes hold of these issues in a half-hearted sort of way, thereby neglecting opportunities offered them to assert themselves as influential factors in establishing principle and precedent.

#### Pennsylvania Pharmacists.

H. W. Zeamer, formerly clerk in Shuler's drug store, Pottstown, has purchased a drug store business in Columbia.

Dr. Slifer's drug store at Twenty-seventh street and Ridge Avenue, Philadelphia, lost three bulk windows in a recent storm.

Dr. Henry C. Porter, of Towanda, has been appointed a member of the State Pharmaceutical Board of Examiners by Governor Pattison of Philadelphia.

John K. Wittel, of Philadelphia, has bought out his former employer's drug store, Mount Joy, and will conduct the business in his own name, hereafter.

During the week ending October 20, 1893, there was imported into the United States oil of rose to the value of \$12,752. The money value of the opium imported in the same period is \$11,769.

#### Acting-Permanent Secretary of the A. P. A.

Edgar L. Patch, president of the American Pharmaceutical Association has issued a card to members announcing the appointment of Prof. Joseph P. Remington of Philadelphia, as permanent secretary during the interim between October, 1893, and the next annual meeting.

All communications relating to the association should from this date be addressed to Prof. Joseph P. Remington, 1832 Pine street, Philadelphia, Pa.

#### Pharmacy Act of Connecticut.

The Committee on Legislation of the Connecticut Pharmaceutical Association announce in a recent circular the passage of the following acts affecting the business interests of pharmacists.

##### CHAPTER CXXV.

"Whenever licensed pharmacists, holding any form of a license to sell spirituous and intoxicating liquors

in license towns, sell spirituous and intoxicating liquors on Sunday, they shall conform in all respects to the restrictions and conditions imposed on holders of prescription licenses issued to pharmacists in no-license towns; but they shall not be required to take out an additional or prescription license therefore.

(The following is the law governing the sale of spirituous and intoxicating liquors on prescription license and which hereafter applies to every pharmacist in the State whether in license or no-license towns whenever he is called upon to sell spirituous and intoxicating liquor on Sunday.)

##### CHAPTER CXCIX. PUBLIC ACTS, 1889.

An act relating to the sale of spirituous and intoxicating liquors by druggists on physicians' prescriptions:

*Be it enacted by the Senate and House of Representatives in General Assembly Convened:*

SECTION 1. No druggist licensed to sell spirituous or intoxicating liquors upon the prescription of a practicing physician, and no servant or agent of any such druggist, shall sell or deliver spirituous or intoxicating liquors upon such prescription unless it shall specify the time when and place where it is given the kind and quantity of liquor prescribed, the name and residence, permanent or temporary, of the person for whom it is prescribed, and that such liquor is needed by such person for medicinal or mechanical uses, and shall be signed with the name written in full by the physician issuing such prescription, who shall be known to such druggist as a reputable practicing physician, residing in this State, and who has no pecuniary interest in the sale for which such prescription provides. Such prescription shall not be filled except within three days next after its date.—Chapter xxxii, 1889, Sec. 306. No druggist licensed to sell spirituous and intoxicating liquor upon the prescription of a practicing physician and no servant or agent of any such person shall make more than one sale or delivery of spirituous and intoxicating liquor upon the same prescription.

Sec. 2. The person making a sale upon any such prescription shall write across the face the number of such prescription, and the date of the sale or delivery thereof, and shall retain and keep such prescription on file in his possession, and shall enter in a book to be kept for that purpose the date of sale, the name of the person to whom such liquor is delivered, and the amount and kind thereof, and such prescription and book shall be open at all reasonable times to the inspection of the selectmen of the town and of the prosecuting agents of the county in which such sale was made, and the entry in said book shall be sufficient evidence of such sale.

Sec. 3. Every physician who shall knowingly issue a prescription for spirituous or intoxicating liquors, falsely stating any fact required to be stated as above, shall be fined not less than fifty dollars nor more than one hundred dollars. Every person who shall procure a prescription for spirituous or intoxicating liquor, under the provisions of this act, intending that the same shall be used as a beverage, shall be fined not less than twenty-five dollars, nor more than fifty dollars. Every druggist licensed to sell spirituous or intoxicating liquors on the prescription of a physician only, and who shall violate any of the provisions of this act, shall be fined not less than fifty dollars, nor more than one hundred dollars.

Sec. 4. All acts and parts of acts inconsistent herewith are hereby repealed.

##### CHAPTER CXXLIX. PUBLIC ACTS, 1893.

Sec. 1. "No pharmacist shall be licensed to sell spirituous or intoxicating liquors to be drunk on the premises."

Sec. 2. "Every pharmacist who shall sell spirituous and intoxicating liquors to be drunk on the premises shall upon conviction forfeit both his druggist license for the sale of spirituous and intoxicating liquors, and also his pharmacy license, and pay a fine of not less than fifty dollars."

##### THE PHARMACY ACT WAS AMENDED AS FOLLOWS:

##### CHAPTER CLXXVII. PUBLIC ACTS, 1893.

SECTION 3195 had these words inserted therein: "And a sum not exceeding two hundred dollars per annum to be expended by said commissioners in the purchase of the necessary material and apparatus for the examination in practical laboratory work of applicants for licenses and the sum of one hundred dollars per annum for clerical services."

##### THE MEDICAL PRACTICE ACT WAS AMENDED AS FOLLOWS:

##### CHAPTER CLVIII. PUBLIC ACTS, 1893.

SECTION 15 reads "the provisions of this bill shall not apply to licensed pharmacists."

Your committee would also state that they earnestly endeavored to obtain an act permitting the delivery of spirituous and intoxicating liquors to minors, when sent for it in cases of sickness, but were met with determined opposition to any changes of that character; therefore as the law now stands *no delivery to a minor under any form of license or on circumstance whatever is legal.*

On vote of the C. P. A. at its seventeenth annual meeting, Feb. 7, 1893, the following board of Censors was appointed [one from each county] "To

whom complaints of the violations of the druggists' liquor license may be made."

D. G. STROUGHTON, Hartford County.  
E. A. GESSNER, New Haven County.  
J. M. BREWER, New London County.  
WM. A. METCALF, Tolland County.  
GEO. E. DRESSER, Windham County.  
JOHN R. FITT, Middlesex County.  
CHAS. S. FINCH, Fairfield County.  
DOWNT PHILPS, Litchfield County.

#### Connecticut Cullings.

Sedwick M. Allen, formerly at Barnes' drug store, Fair Haven, has accepted a position in Branford's store.

Lewis Garriges is erecting a building which will be rented to G. Leslie Dexter for a branch drug store in Waterville.

Baird's drug store was entered by burglars recently, and \$12 was taken from the cash drawer, together with a few other things.

A. McCullom has purchased the drug store on the corner of Park and Main streets, Hartford, which was formerly conducted by Mr. Sawtelle.

#### Massachusetts.

Simard's new drug store in Williams-town was opened recently.

A handsome sign has been lately mounted over the door of John P. Brown's drug store on Main street, Marlboro.

Fred Harmon has taken the position in Riley's drug store, Adams, made vacant by William A. Prince's entering Albany College of Pharmacy.

Ralph E. Stephens has severed his connection with F. A. Hartshorn's drug store, Marlboro, and has begun a course of study at Harvard Medical School.

The engagement is announced of Mr. J. Allen Tailby, Ph.G., president of the Alumni Association of the Mass. College, to Miss Reta B. Smith, youngest daughter of Mr. and Mrs. A. O. Smith, of Natick, Mass., formerly of Sheboygan, Wis.

The first meeting of the Alumni Association of the Massachusetts College of Pharmacy for the Winter course was held at the college building on Friday eve, Oct. 27, at 7.45. Dr. R. W. Greenleaf gave a lecture on the subject of "Foods."

#### New York Notes.

Mayor Edward F. Brush, of Mount Vernon, best known in pharmaceutical circles as the maker of a brand of Kumyss, has been presented by his wife with two bouncing girl babies.

Cards are out announcing the marriage of W. S. Millener, Jr., president of the class of '92, N. Y. C. of P., to Miss Nellie Bacon Davis, of Brockport, N. Y. Mr. Millener conducts a flourishing drug business at Holley, N. Y., where they are to make their home.

Roswell D. Vanderloef, one of the best known crude drug salesmen on the New York drug market, who is now connected with the firm of J. L. Hopkins & Co., has returned from a two weeks' tour of the Eastern States where he went in the interests of his firm. He speaks assuringly of the business outlook.

Among the passengers who sailed for Liverpool on the White Star liner *Teutonic* on Wednesday last was S. M. Burroughs, of Burroughs, Wellcome & Co., Snow

Hill, London. A number of prominent members of the New York drug trade were present to bid him *bon voyage*; but the most conspicuous and widely known member of the group was Henry George, he of Single Tax fame.

Fred P. Hinkston, dealer in druggists' supplies in the Cox Building, North St. Paul street, Rochester, has confessed judgment to H. C. Morris for \$2,907.54 and to the Smith M. Chadbourn estate for \$2,719.09.

C. E. Bennett, of Troy, has accepted a position as head clerk in the drug store of Glass & McBain, of West Troy.

George N. McGarvin, a Western pharmacist, will reopen the City drug store in Gloversville.

C. R. Gordon is having a new dwelling erected for himself in Marlborough.

Here is news for the boys of the N. Y. C. P. and P. C. P. who have been privileged in their graduation year to visit the laboratories of Seabury & Johnson at East Orange. Miss Katherine A. Riker, who was pleasantly known to all as the charming superintendent of the cotton lint and bandage department of the factory, has been married. D. S. Kissam, shipping clerk for the firm, is the happy man and the wedding took place on October 3.

### A Reminiscence of Older New York.

In New York City there are still left a few of the pharmacists who conducted a successful retail business in the days prior to the war. Hazard, Hazard & Co., J. N. Hegeman & Co., J. Milhaus' Son, Fraser & Co., and a few others whose names are not alone known locally but are familiar in nearly all parts of the country.

The removal of Hazard, Hazard & Co. from the well known premises beneath the Fifth Avenue Hotel to a six-story building designed by their own architect for the special needs of a modern pharmacist, recalls some of the circumstances connected with the opening of the Fifth Avenue Hotel and the pharmacy which, for some thirty-five years, was an ornament to that famous hostelry.

In 1856 J. N. Hegeman, according to report, conducted and was proprietor of thirteen New York drug stores, and at the time of the erection of the Fifth Avenue Hotel was actively engaged in adding to the number. He had, in fact, made arrangements with J. C. Eno to lease the premises which was afterward occupied by the late J. R. Caswell, of the firm of Caswell, Hegeman & Co.; but Mr. Caswell was thought to have been a little more prompt in his arrangements for securing a lease. At all events he became the lessee, and Hegeman, a few years later, adopted the policy of concentrating his forces and gave up many of his stores as a consequence.

A. D. Puffer & Sons, of Boston, Mass., whose soda water apparatus are so widely known for their superiority, have issued their hot soda apparatus catalogue for this season, containing new and attractive designs, and dealers contemplating a purchase, or an exchange, will find it to their interests to send for one, which will be mailed free, if this paper is mentioned when writing.

## Obituary.

WILLIAM L. VENNARD.

William L. Vennard, of the firm of McKesson & Robbins, died at his home in West Seventy-fourth street, in this city, on Saturday, October 28, of heart disease, after having been an invalid for some six months.

Mr. Vennard was born in Portsmouth, N. H., in September, 1843, his father having been collector of that port under President Pierce. Having completed his common school education, Mr. Vennard entered the drug store of J. H. Thacher, at Portsmouth, and when Mr. Thacher entered the army Mr. Vennard was left in charge of the business, a position which he filled, as he has every position occupied by him, most acceptably.

At the age of twenty he came to New



WM. L. VENNARD.

York City to accept a clerical position with McKesson & Robbins, where he rapidly rose to the position of manager of the sundries and fancy goods department, and in 1867 was sent to Europe to select new lines of goods.

The success of the department under his care was so marked that in 1885 he was admitted to partnership in the firm; continuing to devote his especial attention to the fancy goods department.

It was at the instance and under the direction of Mr. Vennard that the manufacture of perfumes was engaged in, and this branch of the business was conducted under the firm name of Vennard & Co.

Mr. Vennard was a man of fine presence and address, of wide culture, and personally very popular. His sympathies were wide and his tastes catholic.

He took an active interest in the affairs of the New York College of Pharmacy, having been a trustee and a vice-president of the college for several years past. He was also a member of the downtown association of the chamber of commerce, a director of the Bowery bank, and a member of the committee of manufacturing perfumers, of the Board of Trade and Transportation.

Mr. Vennard's death will not only sadden a large circle of friends, but will leave in still deeper gloom the family of Mr. John McKesson, whose sister is Mrs. Vennard. The family has lost four mem-

bers during the past year, viz., Mr. and Mrs. John McKesson, Sr., and two sons-in-law, Mr. J. L. Kirkland and Mr. Wm. L. Vennard.

Hermann Traute, druggist, of Washington street, Hoboken, one of the trustees of the German Club and prominent in society circles, was found dead in his apartments, 604 Hudson street, early Tuesday morning, October 24. He had been under the care of Dr. W. T. Kudlich several years for heart trouble and his death was ascribed to that complaint. An examination of Mr. Traute's body, however, showed that he had taken poison, which resulted in his death. It is supposed that an overdose was taken by accident.

W. Henry Schively, who up to 1866 did a large importing drug business in Philadelphia, died recently at the age of 72. Mr. Schively was a graduate of the Philadelphia College of Pharmacy, having served his apprenticeship with Frederick Brown at Fifth and Chestnut streets.

Samuel E. Hart died at his home in Adrian, Mich., on Sunday October 23. He was born in Albion, N. Y., in August, 1823, and removed to Adrian, Mich., in 1840. He had been engaged in the drug business in Adrian since about 1847.

Nahum Washburn, for many years proprietor of the drug store in Wood's block, Natick, Mass., died at Bridgewater two weeks since. The funeral was held on Tuesday.

Among those lost in the recent Gulf Coast disaster was Dr. John Frey, a druggist, of Cheniere Caminda, formerly engaged in business in New Orleans.

Among the victims of the Battle Creek, Michigan, railroad disaster was Charles Strub, a drug clerk, of 142 West Thirty-sixth street.

Dr. W. W. Glentworth, an old Philadelphia druggist, died at his home in Race street, not long since, at the age of 81.

P. C. Snyder, for a number of years in business at Thirteenth and Market streets, Harrisburg, Pa., died not long since.

Dr. J. H. Cooper, for thirteen years engaged in the drug business in Burlington, Wis., died lately in his 72d year.

Major Wickliffe Chapman, one of the best known druggists of Kentucky, died at Frankfort not long since.

J. H. Rogers, a highly esteemed traveling salesman for a Peoria drug house, died recently at the age of 39.

Edward Biglow, a drug clerk of Washington, D. C., is dead from the effects of poison self-administered.

Daniel W. Wiggan, of Lewiston, Me., died recently in the 57th year of his age.

Geo. H. Peck, an old time druggist, of Birmingham, died on October 19.

### BOARDS AND COLLEGES.

OHIO BOARD OF PHARMACY.—Examination will be held during the year 1894, as follows: Cincinnati, Tuesday, January 9; Columbus, Tuesday, March 13; Columbus, Tuesday, May 15; Toledo, Tuesday, July 24; Cleveland, Tuesday, Oct. 9.

Applications must be made out and filed with the secretary prior to the day of the meeting; blanks may be obtained from

the secretary by stating the class it is desired to enter.

The examination fee is \$2 for pharmacists and \$1 for assistant pharmacists, and must always accompany the application. When examinations are satisfactory the examination fee is applied toward the payment for registration, provided receipts are preserved and returned to the secretary. Examinations are usually written, and are from 9 A.M. to 12.30 P.M., and from 2 P.M. until finished.

Persons who wish to register as pharmacists must have at least two years' experience in compounding and dispensing drugs on physicians' prescriptions, and one year of like experience obtained under the supervision of a registered pharmacist or assistant pharmacist will be required of those desiring to register as assistant pharmacists.

Examinations during the year 1894 and thereafter will be based upon the pharmacopœia of 1890.

#### ILLINOIS STATE BOARD OF PHARMACY.

—At the practical examination of the State Board of Pharmacy, Illinois, held in Chicago, Oct. 17, 18, 1893, the following passed a satisfactory examination as licentiates in pharmacy, and were registered as registered pharmacists by examination: W. C. Amsden, W. F. Cathcart, J. H. Crapser, H. J. Duncan, F. Hunsche, E. H. Madajesky, F. H. Ruschhaupt, of Chicago, and C. R. Carson, Mahomet. The following passed a satisfactory examination as assistant pharmacists by examination: B. W. Baker, W. L. Becker, R. E. Blackman, C. F. Biebeman, H. Brandon, C. P. Gowman, F. Griffith, T. A. Hohman, L. Holmgren, J. D. King, C. A. King, E. F. Raab, J. B. Sutton, of Chicago, and W. M. Davis, Dwight, and J. H. Walters, South Elgin. Eleven failed to pass a satisfactory examination. The next meeting of the board for examination will be held Nov. 21, 1893, No. 173 39th street, Chicago. Applications should be filed with Frank Fleury, secretary, Springfield, Illinois.

THE COLLEGE OF PHARMACY OF THE UNIVERSITY OF MINNESOTA began its second course under very favorable auspices on October 11. Of the 71 applicants for the junior class 18 fulfilled the requirements for entrance, the remainder not having possessed the preliminary qualifications for entrance required by the college. The course in practical pharmacy (laboratory work) has been extended to 8 months, 3 afternoons each week in junior and senior years. To the regular course of general and qualitative chemistry has been added a special course in quantitative chemistry 2 hours daily laboratory work during 6 months in senior year, and a course in practical organic chemistry, 6 months, 2 hours daily 4 days a week. The course in botany to juniors has been extended from one hour weekly to 4 hours weekly. Eighteen working sections have been added to the pharmacal laboratory: also evaporating hoods, fume chambers, and other furniture. \$2,000 has been expended in the pharmacal laboratory. The department of pharmacognosy has been thoroughly equipped with microscopes, working tables, and specially selected crude drugs. A six-weeks course in pathological laboratory has been added to the senior year.

#### The Water-pail Forge.

One of the most striking things in the exhibition—remarkable on account of being so entirely out of harmony with all our ideas of the conditions under which we expect to see heat generated—is the apparatus to be seen in this exhibit which may be appropriately termed the "water-pail forge." This consists of an ordinary wooden pail filled with water, into which dips a metal plate connected with one terminal of the electric circuit. The other terminal is attached to a pair of blacksmith's tongs, with which the operator picks up and holds the piece of metal to be heated. Immediately upon his plunging this into the water the liquid begins to sputter and the metal to glow, until in a few seconds it is brought to a welding heat and is then speedily melted. The heating is so rapid that neither the water nor the metal a few inches away are more than slightly warmed. This curious phenomenon appears to be due to the localization of the resistance of the circuit at the surface of the heated metal by the interposition of a layer of hydrogen between the metal and the liquid. This is the explanation offered by two Belgian engineers who recently brought out the process abroad with apparently no knowledge of its prior use in this country.—*From Electricity at the World's Fair*, by CHARLES M. LUNGREN, in the *Popular Science Monthly* for November.

#### Adulteration of Cutch.

Cutch is an important article in the trade of Burmah, the exports averaging from 20 to 25 lacs annually in value; but of late the Chinese have been doing their best to discredit the trade in the markets of Europe by wholesale adulteration. Cutch is mainly used outside Burmah, where the native takes it medicinally for tanning purposes, and the Chinese adulterate it by adding extracts from the barks of lein tonkian and panya, which contain a considerable amount of tannin, but nevertheless render the cutch exported spurious and utterly worthless. The adulteration is easily recognized by local merchants thoroughly accustomed to the article, but it has been successfully passed on to consumers in other countries by unscrupulous vendors. The Forest Department and the Chamber of Commerce in Rangoon are both highly interested that the purity and good fame of Burmah cutch shall be beyond question, and the Chief Commissioner has now, on their earnest recommendation, proposed to levy a heavy tax on the manufacture of extracts used for adulteration.—*British and Colonial Druggist*.

#### They Like the U. S. P.

A Canadian Pharmacopœia is an excellent idea, but it won't be published unless there is more enthusiasm than at present. Every druggist knows from experience the disadvantages of the B. P. It is the standard he has to recognize, or rather, he thinks he must, being in British territory. But who hasn't had his patience strained to the utmost limit while endeavoring to get a beautiful result by the instruction of some of the preparations of that same B. P.? A change would be a relief and would make life a little less wearisome. Out here on the coast we get American prescriptions

daily and we compound them conscientiously. We would decide unhesitatingly for the U. S. P. if we had the choice.—British Columbia letter in the *Canadian Druggist*.

#### Note on Syrup of Tolu.

To the Editor of AMERICAN DRUGGIST.

On page 401 of the Pharmacopœia of '90 syrup of tolu is directed to be made by dissolving balsam of tolu 10 Gm. in 50 Cc. alcohol. It is not necessary to use so much, as I got along with 25 Cc. of alcohol. In making large quantities the alcohol saved will amount to something. J. PFEIFFER.

BROOKLYN, N. Y.

#### Review of the Wholesale Market.

NEW YORK, November 1, 1893.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

The market for drugs, dyestuffs and chemicals has witnessed no action of any consequence during the week closed. Complaint is made in many quarters of the general quietude that is yet regarded as a feature of the situation. A notable absence of speculative interest with regard to the usual Fall supplies is characteristic of the current operations. There have been about the usual number of price changes, which have been about equally divided between advances and declines. Beyond the advance in alcohol and senega root, however, no important price changes have occurred.

ALCOHOL has been advanced by the "combine" of producers 2c. per gallon, making the quotation \$2.24 @ \$2.28, less the usual rebate.

BALSAM COPAIBA is still in small supply recent sales at 30c.

BARKS.—Buckthorn continues held at 9c. and the current sales of prime grades have been made at this figure. Cascara; sagrada continues to offer at 7 @ 8c.

BUCHU LEAVES, long, are held at the range of 25 @ 28c., and a moderate business is reported at these figures.

CACAO BUTTER has sold lower in the interval with 33½ @ 34c. quoted as regular for foreign.

CANNABIS INDICA is cabled higher abroad and prices here have advanced in sympathy, 14c. being now required.

CASSIA BUDS do not vary from 18½ @ 19c, though off grades upon the market may be obtained at a less price.

CASTOR FIBER is now held at \$15 @ \$16 with free offerings at these figures.

CUBEB BERRIES are in better supply and ordinary goods are quoted down to 18 @ 25c., while XX is nominally quoted 23½ @ 25c.

CUTTLE BONE, Trieste, is held at 11 @ 11½c. as to quality, though Bari and other varieties are obtainable at 9 @ 10c. as to quantity.

DAMIANA LEAVES are lower with 26c. now quoted as acceptable.

ERGOT is rather quiet at the moment in face of the weak and unsettled condition of the foreign market. Prices here are nominally unchanged.

GUARANA is somewhat unsettled owing to freer offerings. Sales are now making at the range of 90 @ 95c.

JUNIPER BERRIES of the new crop show a rising tendency, and supplies in this market are held at 2c.

MANNA, small flake, is in better supply and now quoted 35 @ 36c.

**MENTHOL** is still in limited supply with  $\$4$  @  $\$4.10$  generally asked.

**OPIUM** has shown an easier tendency during the week, due to a limited demand for the drug. There is, however, no apparent disposition on the part of holders to urge sales at a concession, and prices are fairly steady; for single cases  $\$2.50$  is yet required and in jobbing quantities the range is quoted at  $\$2.52\frac{1}{2}$  @  $\$2.55$ ; powdered does not vary from  $\$3.25$  @  $\$3.30$ .

**QUININE** of foreign make continues very firm though prices have undergone no change since the last report. Upon a cash basis  $19\frac{1}{2}\%$  is the lowest open quotation now named, while upon regular terms  $19\frac{1}{2}$  @  $19\frac{3}{4}\%$  is asked. Some holders are demanding full makers' price of  $20\%$ . The statistical position of the drug at the moment is regarded as good, the stock of foreign being held in good control by manufacturers who are averse to encouraging purchases for speculative purposes.

**SOAP**, white, Contil's, is offering ex-vessel at  $10\frac{1}{2}$  @  $10\frac{3}{4}\%$ .

**TONGA BEANS**, Angostura, continue quiet at the range of  $\$1.70$  @  $\$1.85$  as to quality.

#### DYESTUFFS.

**CUTCH** is given very little consideration, but there is seemingly more urgency to realize. **SM** upon the wharf is held at  $4\frac{1}{2}$  @  $4\frac{3}{4}\%$ , and from store  $4\frac{1}{2}$  @  $5\%$  as to quantity. The price to arrive remains  $4\frac{1}{2}\%$  and **HT** for shipment  $4\frac{1}{2}\%$ .

**DIVI DIVI** continues inactive, without quotable change in price.

**GAMBIER** is receiving moderate attention in a jobbing way at the range of  $3\frac{1}{2}$  to  $4$  @  $4\frac{1}{2}\%$ , the former for quantity lots and the latter for small jobbing parcels.

**INDIGO** is meeting with a fair inquiry from consumers and is reported to be in strong, statistical position. **Madras** is held at  $45$  @  $55\%$ . **Guatemala** at  $\$1$  @  $\$1.20$  and **Bengal** at  $\$1.25$  @  $\$1.65$ .

**SUMAC** is quiet, but the price seems to be well sustained at the range of  $70$  @  $75\%$  for Sicily.

#### CHEMICALS.

**ALUM** is firmer with  $\$1.75$  @  $\$1.80$  asked for lump and ground respectively.

**BLEACHING POWDER** is quiet; the price appears to be well sustained at the previous range.

**BLUE VITRIOL** continues held at  $3\frac{1}{2}$  @

$3\frac{1}{2}\%$  though the demand for consumptive purposes is small and unimportant.

**BORAX** continues dull with prices somewhat irregular. Carloads of crystals are offered at  $7\frac{1}{2}\%$  though in most instances  $8\%$  is wanted. Powdered is quoted at  $8\frac{1}{2}\%$ .

**CHLORATE OF POTASH** does not improve in demand; we quote  $15\%$  for English and  $14\frac{1}{2}\%$  for German.

**CITRIC ACID** is passing out moderately into channels of consumption at manufacturers' prices.

**COPPERAS** remains quiet at  $80$  @  $90\%$  for ordinary quantities.

**CREAM TARTAR** is quoted by the makers  $18\frac{1}{2}$  @  $19\%$  for crystals and powdered respectively.

**NITRATE OF SODA** continues very dull, but quotations are unchanged at  $\$1.87\frac{1}{2}$  @  $\$1.95$  as to quantity.

**QUICKSILVER** continues to be quoted  $52$  @  $53\%$ , and sales are making at this range. **Rothschild's** price in London is  $\pounds 6$  10s., and the market there is below.

**SAL SODA** has been reduced by the makers  $90$  @  $95\%$ .

**TARTARIC ACID** and other staples are maintained at full previous prices.

#### ESSENTIAL OILS.

**ANISE** remains at the previous quotations of  $\$1.40$  @  $\$1.45$ , though no sales of any consequence are reported.

**CASSIA** is maintained in firm position at  $80$  @  $85\%$ , with a fairly active distribution at this range.

**CUBEB** is dull and weak, though the quotations are steady at  $\$2$  @  $\$2.10$ ; lower prices are looked for.

**CLOVE** offers at  $52\frac{1}{2}$  @  $55\%$ , but the demand is very light at the range.

**LEMON** is easier with some of the best brands now obtainable at  $\$1.80$ .

**PEPPERMINT**, **HGH**, is not in free offering and  $\$2.60$  is now asked for single cases. There is a fair inquiry for bulk goods and sales have been made within the range of  $\$2.20$  @  $\$2.40$  as to quality and quantity.

**SASSAFRAS** is very scarce, with the arrivals light. The quotation remains nominally  $34$  @  $37\%$ .

**PENNYROYAL** is dull with the price nominally  $\$1.00$  @  $\$1.10$ .

#### GUMS.

**ALOES** are in limited request. **CURACAO** is developing a show of firmness; in in-

stances  $2\frac{1}{2}$  @  $3\%$  might be done in some quarters though up to  $3\frac{1}{2}\%$  is asked by some in the trade.

**ASAFETIDA** is reported as in good jobbing demand with the tone of the market firm, particularly for the better grades, which are scarce.

**CHICLE** has declined a point and is now quoted  $23\%$ , but this is still regarded as above buyers' limits.

**GUAIAC** is selling in small parcels to consumers within the range of  $16$  @  $24\%$ .

**KINO** is scarce and does not offer below  $75\%$ .

**SHELLAC** is weak, but no important price changes have occurred.

#### ROOTS.

**DANDELION**, German, has been in demand during the interval, and we are reported sales of  $3,000$  lbs. at  $7\frac{1}{2}\%$ .

**IPECAC** offers freely at  $\$1.15$  @  $\$1.20$ , but the demand is limited to small and unimportant quantities.

**GINSENG** is in fair request for export with the sales at  $\$2.25$  @  $\$3.25$ .

**GOLDEN SEAL** is firmly held at  $21\%$  with moderate sales at that figure.

**JALAP** has been inquired for to some extent and we are reported large sales at the quoted range of  $28$  @  $30\%$ .

**ORRIS**, Verona, continues dull with the market easy; jobbing sales at  $14\%$ .

**SARSAPARILLA**, Mexican, is in small supply and held at  $9\frac{1}{2}$  @  $10\%$ .

**SENEGA** is well sustained at the recent advance to  $45\%$ ; the nominal range is quoted  $45$  @  $47\frac{1}{2}\%$ .

**SNAKE**, Texas, offers sparingly at  $21$  @  $22\%$  for the small available supply.

#### SEEDS.

**ANISE**, Italian sifted, is firmer with  $10\frac{1}{2}$  @  $11\%$ , quoted as regular.

**CANARY**, Smyrna, is well sustained at  $2\frac{1}{2}$  @  $2\frac{3}{4}\%$ .

**CARAWAY**, Dutch, is weaker at  $6\frac{1}{2}\%$  quoted as acceptable.

**CELERY** is nominally quoted  $17\%$  with the tendency toward a higher range.

**CORIANDE**, bleached, is quoted  $5\frac{1}{2}$  @  $6\%$  with the available stock very small.

**HEMP**, Russian, is realizing  $3\frac{1}{2}\%$  and is well sustained at the advance.

**MUSTARD**, California, new crop, has sold in large quantities to arrive at  $3$  @  $3\frac{1}{2}\%$  for brown and yellow respectively.

## Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted one time free of charge. Write distinctly, on one side of paper only, and do not use postal cards.*

### POSITIONS WANTED.

**PHARMACIST'S RELIEF**—For evening and Sunday relief work. J. Maxwell MacDonald, 339 Dean street, Brooklyn.

**LADY** graduate, experienced, wishes position in drug store or dispensary, city or country; A1 reference. Address "Pharmacist," at this office.

**POSITION WANTED**—By a young man having good practical experience; speaks Swede and English; 24 years; can furnish the best of references. Address Wm. Hornstrom, 737 Fifth street, Warren, Pa.

**POSITION WANTED**, city or country, by a licensed drug clerk; has had six years' experience; 25 years of age; sober and industrious; good reference. Address "Antifebrin," 82 Washington street, Binghamton, N. Y.

**YOUNG MAN**, single, two years' experience, desires a position in drug store; no bad habits; A1 references; salary not the main object; Wisconsin preferred. Address Fred Kendell, Rock Elm, Wis.

**SITUATION WANTED** as distributing advertising agent; have had six (6) years' experience in the retail drug business; best reference, including present employer. Address, giving salary, "Lunar Caustic," 544 North street, Rochester, N. Y.

**DRUG CLERK** wants situation; reference from last employer. Address "M. C. W.," this office.

**WANTED**.—Situation by young man in first-class pharmacy, by first of January; twenty-five years of age; seven years' practical experience; three years with present employer and four with former. Address T. M. Jacqueman, graduate Louisville College of Pharmacy, 468 East Oak street, New Albany, Ind.

**SITUATION WANTED**.—Thorough druggist, easy address and good habits, with 14 years' experience, will be glad to hear from California druggists. Box 46, Magnolia, Miss.

**POSITION WANTED** by a young man in retail drug store;  $5\frac{1}{2}$  years' experience; unlicensed; can furnish best references. Address John A. Fairly, Ellenville, Miss.

**DRUGGIST'S RELIEF CLERK**, evenings and Sundays. Chas. F. Antz, 417 West 30th street.

**POSITION WANTED**—Position wanted as traveling salesman or any responsible position in drug house; have had experience in both; am a graduate of N. Y. C. P. Address "Responsible," at this office.

### BUSINESS OPPORTUNITIES.

**DRUG STORE WANTED**—I want to buy a drug store in good town. Address "Bromo," care AMERICAN DRUGGIST, 17 College place, New York City.

**I WANT** to purchase a drug store in good locality commanding a good prescription and general drug trade; invoice  $\$3,000$  to  $\$6,000$ ; can furnish cash and security. Address "Carlisle," at this office.

**A good drug store**, valued at  $\$4,500$ , is for sale in New Jersey for only  $\$3,000$ , if bought at once; sales average about  $\$23$  daily. Address "Creta," at this office.

**FOR SALE**.—Stock, machinery and trademark for the manufacture of gelatine capsules. Address 180 Third avenue, Brooklyn, N. Y.

**TO RETIRE**.—I offer fine fixtures, stock and trade worth  $\$2,500$ , for  $\$1,500$ , spot cash. Address "Doctor," 24 Colden street, Newburg, N. Y.

**WANTED**.—Complete volumes of the PHARMACEUTICAL RECORD for 1887, 1888, 1889, 1890, 1891 and 1892; either bound or unbound, preferably the former; state price and condition of volumes. F. T. Wulling, Minneapolis, Minn.

**Clerks and Employers should call at this office, register their wants and examine our list of POSITIONS WANTED POSITIONS VACANT and BUSINESS OPPORTUNITIES, which can be consulted free of charge.**

# ORIGINAL PACKAGE PRICES.

It should be understood that the prices quoted in this column are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a considerable range of prices.

## Drugs, Chemicals, &c.

|                            |       |       |
|----------------------------|-------|-------|
| Acetanilid, bulk, per lb.  | .35   | .36   |
| " lb., per lb.             | .58   | .58   |
| " oz., per oz.             | .06   | .06   |
| Acetate of lime:           |       |       |
| Brown, per 100 lb.         | .90   | .95   |
| Gray, per lb.              | .01   | .01   |
| Acids:                     |       |       |
| Acetic Com'l.              | .01   | .02   |
| Aqua fortis, 36 deg.       | .03   | .03   |
| " 40                       | .04   | .04   |
| Benzic, German             | .47   | .54   |
| " English                  | .09   | .09   |
| Boracic, Whole             | .13   | .14   |
| " Powdered                 | .13   | .14   |
| Citric, American           | .45   | .46   |
| " English                  | .45   | .46   |
| Carbolic Crystals          |       |       |
| bulk                       | .13   | .17   |
| lb. bottle                 | .20   | .21   |
| Muriatic, 18 deg.          | .09   | .13   |
| Nitric, 38 degrees         | .03   | .04   |
| " 40                       | .04   | .04   |
| Oxalic, English            | .06   | .06   |
| " German                   | .06   | .06   |
| Picric                     | .26   | .26   |
| Salicylic                  | 1.00  | 1.20  |
| Sulphuric                  | .80   | 1.00  |
| Tartaric, Crystals         | .25   | .23   |
| " Powdered                 | .23   | .24   |
| Tannic                     | 1.05  | 1.20  |
| Alcohol, Grain, per gal.   | .24   | .28   |
| (Less rebate.)             |       |       |
| Weed, 95/100               | 1.00  | 1.05  |
| Alcoholene                 | .00   | .10   |
| Alum, Lump, per 100 lb.    | .00   | .15   |
| Ground, per 100 lb.        | .00   | .10   |
| Antifebrine, per oz.       | .19   | .20   |
| Antipyrine, per oz.        | 1.20  | 1.40  |
| Arrow root, Berm., lb.     | .24   | .25   |
| St. Vincent, in bbl., lb.  | .11   | .11   |
| Arabic:                    |       |       |
| Red Saxon, lb.             | .05   | .06   |
| White                      | .03   | .03   |
| Balsam, Copaiba, lb.       | .30   | .35   |
| Fir, Canada, gal.          | 3.25  | .30   |
| Fir, Oregon, gal.          | .75   | .80   |
| Peru, lb.                  | 1.35  | 1.40  |
| Tolu, lb.                  | .23   | .25   |
| Bark, Buckthorn, per lb.   | .09   | .09   |
| Cascara Sagrada, lb.       | .07   | .08   |
| Elm, lb.                   | .10   | .12   |
| Orange peel                | .06   | .07   |
| Sassafras, per lb.         | .08   | .08   |
| Soap, lb.                  | .03   | .04   |
| Bicarb. Soda, Engl., lb.   | .03   | .03   |
| domestic, lb.              | .29   | 3.00  |
| Bichromate Pot'h, lb.      | .10   | .11   |
| Bismuth, Sub. Nit.,        |       |       |
| per lb., bulk              | 1.95  | 2.00  |
| Bismuth, Sub. Carb.,       |       |       |
| per lb., bulk              | 2.25  | 2.30  |
| Bleach'g Pow'd., per lb.   | .08   | .09   |
| Blue Vitriol, lb.          | .03   | .03   |
| Borax, refined, lb.        | .08   | .08   |
| Concentrated, lb.          | .07   | .08   |
| Bromine, best ad. ton      | 19.00 | 19.50 |
| Bromide Potash, Do-        |       |       |
| mestic, b'k, lb.           | .35   | .36   |
| bottles, lb.               | .39   | .40   |
| Bromide Ammonium,          |       |       |
| bulk                       | .43   | .44   |
| Bromide Sodium, b'k.       | .40   | .41   |
| Bromine, bulk              | .43   | .47   |
| Burgundy pitch, per lb.    | .08   | .08   |
| Cacao Butter               |       |       |
| 1-lb. boxes, lb.           | .33   | .34   |
| Dutch A., per lb.          | .33   | .34   |
| Caffeine, Am'l.            | 1.50  | 2.25  |
| Camphor, ref'd., bbls, lb  | .40   | .46   |
| cases, lb.                 | .48   | .50   |
| Cantharides Chinese, lb.   | .28   | .30   |
| Russian, lb.               | .70   | .75   |
| Carb. Ammonia              |       |       |
| cases, lb.                 | .08   | .08   |
| Castia Buda, lb.           | .18   | .19   |
| Castor Oil, cases, lb.     | .15   | .15   |
| Barrels, lb.               | .14   | .15   |
| Caustic Soda, 70%, 100 lb. | 2.70  | 2.80  |
| Caustic Soda, 60%, 100 lb. | 2.90  | 3.10  |
| Chalk, Engl. Precip.,      |       |       |
| bulk, lb.                  | .04   | .06   |
| Chloral Hydrate Crystals,  |       |       |
| bulk, per lb.              | .05   | 1.05  |
| Hydrate crusts, bulk,      |       |       |
| per lb.                    | .02   | 1.00  |
| Chlorate Pot. Cryst., lb.  | .14   | .15   |
| Pow'd., lb.                | .13   | .15   |
| Chloroform, Bulk, lb.      | .50   | .51   |
| Cinchonidine, Sulphate     |       |       |
| of German, oz.             | .08   | .08   |
| Citrate, U.S.P. Iron, lb.  | .00   | .50   |
| Soluble                    | .00   | .55   |
| Iron and Ammonia, lb.      | .00   | .50   |
| Iron and quinine, lb.      | 1.50  | 1.55  |
| Iron and strychnine, lb.   | 2.00  | 2.05  |
| Phosphate, U.S.P. lb.      | .00   | .57   |
| Pyrophos, U.S.P., lb.      | .00   | .55   |
| Pyrophos, Soluble, lb.     | .00   | .55   |
| Potash, per lb.            | .49   | .49   |
| " Soda, per lb.            | .49   | .49   |
| Cobalt, pow'd., lb.        | .20   | .28   |
| Cocaine Murate, per oz.    | 5.15  | 6.00  |
| Codine, bulk, oz.          | 4.15  | .00   |

|                          |       |       |
|--------------------------|-------|-------|
| Codine, eight.           | 4.65  | .00   |
| Cod Liver Oil, Nor-      |       |       |
| wegian, bbls.            | 18.50 | 22.00 |
| Colocynth:               |       |       |
| Trieste, lb.             | .27   | .38   |
| Spanish                  | .20   | .24   |
| Copperas, per 100 lb.    | .80   | .90   |
| Cr. Tartar, Crystals, lb | .18   | .19   |
| Powdered, lb.            | .19   | .20   |
| Cubeb Berries, XX, lb.   | .23   | .25   |
| Ordinary, lb.            | .18   | .25   |
| Cutch, bales, SM, lb.    | .04   | .05   |
| Cutch, boxes lb.         | .00   | .09   |
| Cuttle bone, Trieste, lb | .11   | .12   |
| Jewelers' lb.            | .35   | .00   |
| Dextrine                 | .04   | .05   |
| Divi Divi, per ton       | 45.00 | 55.00 |
| Dragon's Bl'd, lump, lb  | .00   | .00   |
| In reeds, lb.            | .45   | .50   |
| Epsom Salts, per 100 lb. | 1.00  | 1.10  |
| Ergot:                   |       |       |
| G'm'n and Russ'n, lb     | .30   | .32   |
| Spanish, lb.             | .38   | .40   |
| Ergotine, Domestic       | .00   | 4.00  |
| German                   | 4.00  | .00   |
| Flowers:                 |       |       |
| Arnica Flowers, per lb   | .10   | .11   |
| Chamomile                |       |       |
| German, New, lb.         | .18   | .25   |
| Roman, New               | .24   | .26   |
| Roman, lb., old          | .18   | .20   |
| Lavender Flowers         |       |       |
| Ordinary, per lb.        | .04   | .08   |
| Select, per lb.          | .15   | .65   |
| Gambier, lb.             | .04   | .04   |
| Glycerin, bbls, lb.      | .13   | .14   |
| cases, lb.               | .14   | .16   |
| Grains, Paradise, lb.    | .07   | .07   |
| Guarana, lb.             | .90   | .95   |
| Gums:                    |       |       |
| Aloes, Barb, lb.         | .06   | .12   |
| " Cape, lb.              | .05   | .08   |
| " Curacao, lb.           | .08   | .03   |
| " Socotrine, lb.         | .28   | .40   |
| Arabic 1st picked        | .50   | .55   |
| and                      | .36   | .40   |
| Arabic, sorts            | .12   | .13   |
| Asafetida, lb.           | .12   | .25   |
| Benzoin, lb.             | .20   | .38   |
| Chicle, lb.              | .23   | .25   |
| Gamboge, lb.             | .55   | .60   |
| Guaiac, lb.              | .16   | .24   |
| Kino, lb.                | .75   | 1.00  |
| Mastic, lb.              | .75   | 1.00  |
| Myrrh, lb.               | .80   | .38   |
| Oilbanum, sorts, lb.     | .05   | .06   |
| " tears, lb.             | .11   | .13   |
| Sandrac, lb.             | .29   | .30   |
| Senegal, picked, lb.     | .14   | .60   |
| sorts, lb.               | .09   | .10   |
| Shellac, DC, lb.         | .00   | .37   |
| " VSO, lb.               | .00   | .30   |
| " Diam'd 1, lb           | .00   | .29   |
| " SS, lb.                | .28   | .29   |
| " TN, lb.                | .00   | .26   |
| " Garnet                 | .00   | .24   |
| " Bleached, lb           | .26   | .27   |
| Tragacanth, Aleppo, lb.  | .30   | .58   |
| Harlem Oil               | .00   | .50   |
| Indigo, lb.              | .45   | 2.00  |
| Insect Flowers           | .18   | .20   |
| Insect Powder, pure, lb. | .16   | .22   |
| Iodide Potash, bulk, lb. | 2.70  | 2.75  |
| " bot's, lb.             | 2.85  | 2.88  |
| Islinglass, Am'r'n, lb.  | .47   | .60   |
| Japan                    | .03   | .05   |
| Juniper Berries, lb.     | .32   | .08   |
| Leaves:                  |       |       |
| Belladonna, per lb       | .10   | .12   |
| Buchu, short, lb.        | .12   | .15   |
| " long, lb.              | .25   | .28   |
| Coca, prim, lb.          | .12   | .30   |
| Damiana, lb.             | .26   | .27   |
| Hyocyanus                | .07   | .08   |
| Jaborandi, lb.           | .07   | .08   |
| Senna Alex nat'l, lb.    | .14   | .16   |
| Senna Alex garbled lb    | .28   | .27   |
| Senna Tinney, lb.        | .06   | .18   |
| Stramonium               | .05   | .08   |
| Licorice, P. & S., lb.   | .24   | .00   |
| Lupulin, German          | .70   | 1.75  |
| Lycopodium, lb.          | .58   | .60   |
| Manna, large flake, lb.  | .00   | 1.25  |
| Small flake, lb.         | .35   | .38   |
| Menthol, Japanese        | 4.00  | 4.10  |
| Mercurials:              |       |       |
| Blue Pill, lb.           | .32   | .34   |
| Caiomet, lb.             | .71   | .00   |
| Cor. Sublimite, lb.      | .62   | .00   |
| Mercury and Chalk        | .30   | .00   |
| Ointment, lb.            | .28   | .30   |
| Red Precipitate, lb.     | .81   | .00   |
| White                    | .86   | .00   |
| Morphine, bulk, oz.      | 1.00  | 2.05  |
| Eights, oz.              | 2.25  | 2.30  |
| Moss, Irish, lb.         | .06   | .06   |
| Irish, bleached, lb.     | .13   | .15   |
| Muriate Potash, per 100  |       |       |
| lbs.                     | 1.78  | 1.85  |
| Naphthaline, flake, per  |       |       |
| lb.                      | .03   | .05   |
| Naphthaline, Ball, per   |       |       |
| lb.                      | .00   | .05   |
| Nitrate Silver, oz.      | .48   | .49   |
| Nitrate Soda, 100 lb.    | 1.85  | 1.95  |

|                            |      |      |
|----------------------------|------|------|
| Nux Vomica, lb.            | .03  | .04  |
| Nutgalla, China, per lb.   | .13  | .13  |
| Aleppo, per lb.            | .14  | .14  |
| Oils, Essential:           |      |      |
| Anise                      | 1.40 | 1.45 |
| Almonds, Bitter            | 7.50 | .00  |
| " Sweet                    | .20  | .43  |
| Bay, per lb.               | 3.50 | 4.00 |
| Bergamot                   | 2.00 | 2.75 |
| Cajuput, Native            | .45  | .55  |
| Camphor                    | .07  | .08  |
| Cassa                      | .80  | .85  |
| Citronella, Native         | .24  | .28  |
| Clove                      | .50  | .55  |
| Copaiba                    | .70  | .75  |
| Croton                     | .75  | .80  |
| Cubeb                      | 2.00 | 2.10 |
| Erigeron, per lb.          | 1.45 | 1.50 |
| Geranium Chris.            | 4.50 | 7.50 |
| Lavender                   | 1.20 | 1.85 |
| " Garden                   | .40  | .90  |
| Lemon, as to brand         | 1.35 | 1.80 |
| Lemongrass                 | .75  | .00  |
| Musk, per lb.              | 7.00 | 8.00 |
| Myrbane                    | .17  | .19  |
| Neroli                     | .22  | .29  |
| Nutmeg                     | 1.75 | 2.75 |
| Orange                     | 1.50 | 1.65 |
| Origanum                   | .24  | .00  |
| Peppermint                 | 1.00 | 1.10 |
| Peppermint, bulk           | 2.20 | 2.40 |
| HGH                        | 2.50 | 2.65 |
| Rose                       | 7.50 | 8.00 |
| Sandalwood                 | .00  | .25  |
| Sassafras                  | .34  | .37  |
| Sassafras, Artificial      | .28  | .30  |
| Spearment                  | 1.60 | 1.90 |
| Tansy                      | 2.00 | 3.00 |
| Wintergreen                | 1.55 | 1.60 |
| Artificial                 | .95  | .00  |
| Wormwood                   | .25  | .00  |
| HGH                        | .00  | 3.75 |
| Opium, Natur'l, ca., per   |      |      |
| lb.                        | 2.50 | 2.57 |
| Opium, Ordinary,           |      |      |
| Jobbing, per lb.           | 2.55 | 2.55 |
| Opium, Pow'd., per lb.     | 3.25 | 3.30 |
| Phenacetine, per oz.       | .85  | .90  |
| Prussiate Potash, Yel-     |      |      |
| low, per lb.               | .21  | .22  |
| Red, per lb.               | .39  | .42  |
| Quicksilver, flasks, per   |      |      |
| lb.                        | .52  | .54  |
| Quinine:                   |      |      |
| Domestic, bulk, oz.        | .20  | .23  |
| Domestic, oz.              | .28  | .29  |
| German, bulk               | .19  | .19  |
| German, oz.                | .27  | .29  |
| Roots, Aconite, lb.        | .09  | .12  |
| Althea, cut, lb.           | .15  | .18  |
| Alkanet, lb.               | .06  | .07  |
| Arnica, lb.                | .12  | .13  |
| Belladonna Ger., lb.       | .08  | .12  |
| Blood, lb.                 | .05  | .06  |
| Calamus, lb.               | .07  | .08  |
| Calamus, bleac'd, lb.      | .21  | .24  |
| Colchicum, per lb.         | .11  | .14  |
| Colombo, lb.               | .06  | .11  |
| Dandelion, Germ. lb.       | .07  | .08  |
| Dogwood, lb.               | .08  | .10  |
| Galangal, lb.              | .04  | .04  |
| Gentian, lb.               | .03  | .04  |
| Ginseng, lb.               | 2.25 | 3.25 |
| Ginger, Jamaica,           |      |      |
| bled, lb.                  | .16  | .17  |
| Ginger, Jamaica,           |      |      |
| unbled, lb.                | .15  | .17  |
| Golden Seal, lb.           | .00  | .21  |
| Hellebore, pow'd., lb.     | .07  | .08  |
| Ipecac, lb.                | 1.15 | 1.30 |
| Jalap, lb.                 | .28  | .30  |
| Kava Kava, lb.             | .30  | .00  |
| Licorice, select, lb.      | .08  | .15  |
| " Pt. d., lb.              | .05  | .12  |
| Lovage, lb.                | .50  | .55  |
| Mandrake, lb.              | .03  | .04  |
| Orrie, Florentine, lb.     | .25  | .35  |
| Orrie, Verona              | .00  | .14  |
| Pink, lb.                  | .22  | .25  |
| Rhubarb, whole, lb.        | .25  | .60  |
| Sarsaparilla, Hond. lb.    | .28  | .42  |
| Sarsaparilla, Mex. lb.     | .09  | .10  |
| Senega, lb.                | .45  | .47  |
| Serpentaria, lb.           | .20  | .22  |
| Valerian, Belgian, lb.     | .07  | .07  |
| " German, lb.              | .10  | .12  |
| Saffron, Amn., lb.         | .30  | .32  |
| Spanish, Valencia, lb.     | 6.50 | 7.00 |
| Spanish, Alicante, lb.     | 5.00 | 5.50 |
| Sal Ammoniac, lump, lb.    | .08  | .08  |
| Do., Granulated, lb.       | .05  | .06  |
| Sal Soda, Eng., 100 lb.    | 1.08 | 1.05 |
| " American                 | .90  | .95  |
| Salt peter, crude, per lb. | .04  | .05  |
| Salt peter, Refined, per   |      |      |
| lb.                        | .06  | .08  |
| Seeds, Anise, Ital., lb.   | .06  | .11  |
| Anise, German, lb.         | .06  | .06  |
| Anise, Star, lb.           | .22  | .23  |
| Canary, Smyrna, lb.        | .05  | .05  |
| Canary, Sicily, lb.        | .00  | .04  |
| Caraway, lb.               | .06  | .07  |
| Cardamon, Aleppy,          |      |      |
| per lb.                    | .65  | .75  |
| Celery, lb.                | .17  | .00  |

|                            |       |       |
|----------------------------|-------|-------|
| Cardamon, Malabar,         |       |       |
| per lb.                    | .75   | .45   |
| Colchicum, lb.             | .12   | .14   |
| Coriander, lb.             | .05   | .05   |
| Cummin, lb.                | .11   | .00   |
| Fennel, Germ., lb.         | .00   | .12   |
| Flax Meal, per lb.         | .00   | .00   |
| Foenugreek, lb.            | .00   | .05   |
| Hemp, Russian, lb.         | .03   | .00   |
| Mustard, yel. Cal. lb.     | .04   | .05   |
| Mustard, brown, Cal.       |       |       |
| lb.                        | .03   | .04   |
| Poppy, per lb.             | .09   | .10   |
| Quince, German, lb.        | .45   | .50   |
| Rape, German, lb.          | .03   | .03   |
| Rape, English, lb.         | .05   | .06   |
| Soap, Castile, Mara,       |       |       |
| mottled, pure, lb.         | .06   | .06   |
| White, lb.                 | .09   | .10   |
| Soda Ash, lb., 48% per     |       |       |
| 100 lb.                    | 1.50  | 1.80  |
| Squilla, white, lb.        | .04   | .06   |
| Sugar Milk, pow'd., lb.    | .11   | .14   |
| Sugar Lead, white, lb.     | .11   | .11   |
| Lead, brown, lb.           | .05   | .06   |
| Sulphate Ammonia, per      |       |       |
| 100 lb.                    | 2.90  | 3.00  |
| Do. Potash, 48% per        |       |       |
| lb.                        | 1.15  | 1.15  |
| Do., Potash, 60% per       |       |       |
| lb.                        | 2.20  | 2.15  |
| Sulphur, Roll              | .00   | .01   |
| " Flour                    | .00   | .01   |
| Spirits Nitre, U. S. P.    | .39   | .40   |
| Spirit Ammonia, Arom.      | .44   | .45   |
| Sulphuric Ether            | .54   | .61   |
| Sumac, Sicily, ton         | 75.50 | 77.00 |
| " Virginia                 | 43.00 | 47.50 |
| Tar Barbados, gal.         | .00   | .45   |
| Tin Crystals, bbls., per   |       |       |
| lb.                        | .15   | .00   |
| Jara, per lb.              | .17   | .00   |
| Tonka Beans, Angost.       |       |       |
| lb.                        | 1.70  | 1.85  |
| Tonka Beans, Para, lb.     | .55   | .65   |
| " Surinam                  | .75   | .00   |
| Turpentine, Spirits        | .39   | .40   |
| Vanilla Beans, lb.         | 6.00  | 6.00  |
| " cut, lb.                 | 5.00  | 6.00  |
| Venice Turpentine, bar-    |       |       |
| rels, lb.                  | .18   | .19   |
| Cana, lb.                  | .10   | .10   |
| Wax, Brasil, Veg., lb.     | .10   | .17   |
| Japan, lb.                 | .00   | .08   |
| Zink Oxide                 | .30   | .48   |
| Animal and Vegetable Oils. |       |       |
| Lineed, City, raw, gal.    | .40   | .00   |
| Lineed, City, boiled,      |       |       |
| gal.                       | .00   | .43   |
| Lineed, Western, raw,      |       |       |
| gal.                       | .00   | .00   |
| Lard, City, Ex. Winter,    |       |       |
| gal.                       | .00   | .0    |

# American Druggist and Pharmaceutical Record.

A JOURNAL OF PRACTICAL PHARMACY.

Vol. XXIII. No. 19.

NEW YORK, NOVEMBER 9, 1893.

WHOLE No. 272.

## AMERICAN DRUGGIST PUBLISHING COMPANY.

37 COLLEGE PLACE, NEW YORK.

A. R. ELLIOTT, PRESIDENT.

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If paid in advance direct to this office, 1.50  
" " for Foreign Countries, - - - 2.50  
Single Copies, - - - - - .15

The "American Druggist and Pharmaceutical Record" is issued on Thursday of each week. Changes of advertisements and all copy for publication should be received before Tuesday of each week.

We are not responsible for any money paid to agents. All remittances should be made direct to this office. Express Orders, Post-Office Orders and Drafts on New York should be made payable to the "American Druggist Publishing Company" and addressed to them at 37 College Place, New York.

*Liberal Commissions to Club Agents.*

MONEY is somewhat easier under the natural improvement in trade volume incident to the season, but whether money is plentiful or not the retail druggist should not fail to keep posted on the actual bottom figures of the market prices for drugs as given in our weekly market report. Remember this is the *only* paper going to the retail trade that dares give the actual cost price of drugs. All others are afraid of the disapproval of the jobbing drug trade.

## THE RIGHT USE OF TRADE JOURNALS.

FROM an esteemed correspondent in Connecticut, who has only recently become aware of the value of the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD as an aid to close buying, we are in receipt of a communication worded as follows:

I am convinced that I have not heretofore used the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD as I ought, for I am confident that I could have saved many dollars had I consulted the wholesale prices current when ordering goods. You may continue my subscription, and in the future I will keep myself better posted on prices.

In expressing himself in this way our correspondent but gives voice to something which has long been recognized by traveling salesmen. Upon this subject a recent contributor to a trade journal has the following to say:

When I was a salesman on the road, and, upon entering a store, saw the trade journal unopened, circulars and price lists unread, I always knew I might ask good prices with safety. On the contrary, where I saw the trade paper open at the desk, I felt my way carefully to discover what prices I might get.

## QUEER DIET FOR LITERARY PEOPLE.

ONE of our valued foreign exchanges, the *Hospital*, of London, has been giving its attention to the kind of diet which in its opinion is likely to prove most beneficial to literary workers, and the *Sun* of this city, with the delicate humor peculiar to that clever sheet, has been poking fun at the *Hospital* regimen. The system prescribed by the *Hospital* directs those who follow literature as a profession to rise early, take a cup of coffee with toast at half past six, write for a while, take breakfast at 8, write until noon, take a lunch at one o'clock, smoke a pipe after it, take a cup of black coffee at 2, write a couple of hours, take a cup of tea at 4, write until half past six, take dinner at 7, winding it up with a cup of black coffee, take things easy until a quarter of eleven, then take a small cup of cocoa, and be ready for bed at 11 o'clock.

Commenting upon this novel course of diet the *Sun* marks its extreme disapprobation by concluding "It is worthy of a paper called the *Hospital*." That there is a preponderance of coffee in the system of diet just outlined, no one will dispute, but that there is sufficient to caffeinize an individual will hardly be admitted. It is at least much superior to the system advocated by the *Sun*, which indicates the consumption of oatmeal porridge, hash, coffee, gymnastic exercises with the baby, followed lastly by the very best dinner one can afford.

The kind of diet best suited for literary workers, or any other kind of workers for that matter, may in our opinion be best left to the workers themselves, they being most apt to be the best judges of the kind of food which is best adapted to their physical needs and which would be most likely to contribute to their mental comfort.

## MR. KLINE TELLS WHERE CUTTERS' SUPPLIES COME FROM.

WHAT have retail druggists to say in answer to the letter of the chairman of the Committee on Proprietary Goods which we print elsewhere in this issue? If the facts are as stated by Mr. KLINE (and we have no reason to question their accuracy) a fine field of "research" is opened up to the officers of the Interstate Retail Druggists' League having jurisdiction in Ohio.

(Written for the American Druggist and Pharmaceutical Record.)

## THE TRAINING OF THE SHOP.

By WILLIAM B. THOMPSON.

Professor Oscar Oldberg has contributed to the columns of *The Apothecary* for September quite a lengthy paper on "Compulsory Pharmaceutical Education in America."

The arguments seem to be chiefly directed against the possibility of an adequate pharmaceutical education being attainable in the shops, *ergo* the curriculum of the college is the means by which a thoroughly practical knowledge of the art may be secured. This is a view from one standpoint only. Five of the leading teaching institutions of the country have been in existence by average forty-seven years, and now we are told that there are comparatively no educated pharmacists in the shops competent to instruct apprentices. Is this to be accepted as the result of forty-seven years of systematic collegiate introduction? If so, it is not a flattering testimony, certainly, to the efficiency of that system.

By common assent among pharmacists no single cause has tended more to lower the status of pharmacy in a scientific aspect than the inseparable business rivalry of the colleges. Beyond the number actually needed and already established to meet the gradual growth and demand of the time, these institutions became enterprises with solely pecuniary interests, and these interests became paramount to every other consideration. Then it was that the true sentiment in regard to pharmaceutical education found expression in a resolution passed by the American Pharmaceutical Association in 1871 declaring "That Colleges of Pharmacy should be controlled by pharmacists," and that "a practical experience" in the shop should be a *sine qua non* among the requirements for graduation. The forcible truth of these assertions yet remains, and it has been repeatedly emphasized by demanding that this term of "practical experience" shall not be less than four years. Colleges of pharmacy had begun to multiply as business ventures, because pharmacy was growing, and the country was extending. One notable institution, in order to secure a share of the patronage of the older schools, declared its purpose to open a short cut into the realm of pharmaceutical practice and science, and preferred to make better qualified pharmacists under its newer methods of instruction than the tutelage of the shop and the then existing institutions could possibly supply. This was a tempting offer to the novice, but it received the severe disapproval of the prominent representatives of the pharmaceutical profession. In addition to this profusion of promise it was even claimed that under its thorough methods it was not deemed an essential requirement that the student, either before or during his terms of tuition, should even see the interior of a drug store! This plan substituted a limited term of months of necessarily disjointed theoretical instruction, and of practice, for a four years' service of continuous exercise in the manipulations of an art which the limits of an average life, with uninterrupted labor and study, cannot compass! As reasonably might it be expected that an artisan could acquire a knowledge of his trade by studying models of tools, and simply inspecting the material of which he should construct his work. Need it cause surprise, then, to reflect that at that time, and subsequently, the majority of the States sought the enactment of pharmacy laws, and created boards of pharmacy to protect the trade against the tide of incompetency which was pouring into every accessible quarter.

To the earnest seeking student, then, no better

illustration of the invaluable resources of shop-training for acquiring an intimate knowledge of the practice and of the science can be presented than is found in the histories of Scheele in the old world, and of Procter in the new.

## PHARMACEUTICAL NOTES.

**Malakin** is the latest addition to the list of antiseptics, antipyretics, and antineuralgics. It is a derivative of salicylic acid and phenacetin.

**Niaouli Oil.**—Dr. G. Bertrand (*Bull. Gen. d. Ther.*, 1893 No. 20) states that niaouli (*Melaleuca viridiflora*) grows abundantly in New Caledonia. The oil produced by distilling its leaves is of a slightly yellow color and of a strong aromatic odor. Its taste is at first pungent and then refreshing (like our peppermint). The density of this oil was found by the author to be of 0.922, and its deviation of a ray of polarized light to be 0.42° to the right. The oil is not affected by litmus; it is insoluble in water and glycerin, but soluble in alcohol, ether or benzin.

**Disinfectin** is the name (*Pharm. Zeitschr. f. Russl.*) of a preparation intended for ordinary disinfection, said to be obtained as follows: 5 parts of the residue left in distilling crude naphtha are thoroughly mixed with 1 part (by volume) of concentrated sulphuric acid, and allowed to cool. The fluid portion is separated from the sediment, and gradually mixed with an equal volume of 10 per cent. soda solution, and well shaken. Thus it obtained a yellowish-brown emulsion—disinfectin—which, when intended for use, is diluted with four parts of hot water, and thoroughly shaken.

**Peroxide of Hydrogen** has been used as a handy method of removing bacteria from drinking water for household purposes during outbreaks of cholera or other zymotic diseases. It is stated on the authority of careful scientific experiments that an addition of one part to 1,000 parts of the water when allowed to stand for twenty-four hours will effectually destroy any cholera or typhoid germs which may be present. The taste of the water does not suffer any alteration, and it is perfectly harmless. But in case this expedient should be tried it must be borne in mind, first, that the particular peroxide of hydrogen employed must be the purest purchasable, as it may contain minute traces of the poisonous barium chloride; and, secondly, that, to insure its acting efficiently on the microbes, the samples used must be freshly prepared.

**Constituents of Mate.**—Dr. Hermann Kunz-Krause, of the University of Lausanne, has investigated the chemical constituents of the *Ilex Paraguensis* or maté, and finds (*Arch. der Pharm.*) besides the constituents heretofore said to be present—caffeine, tannin, proteid substance, etc.—that the leaves contain combined cholin, a reducing but optically inactive sugar as a decomposition product of the tannic acid, notable quantities of water-soluble potassium and magnesium salt. He also noted (II.) that maté is free from ilixanthin, which is found in the allied *Ilex aquifolium*. (III.) The tannic acid present is identical with that of coffee, both yielding dioxycinnamic acid as a decomposition product. (IV.) The dioxycinnamic acid so obtained forms neutral monobasic and dibasic salts with bivalent metals, and yields; on partial oxidation with nitric acid containing nitrous acid; as further derivatives pyrocatechin, and oxalic and hydrocyanic acids. (V.) The derived dioxycinnamic acid is analogous to the other aromatic oxyacids, since at 200° C. its carboxyl group splits off as CO<sub>2</sub>, meta-para-dioxystyrol resulting.

## News and Notes.

### Maine Mention.

The new drug firm of Cushing & Sampson, Skowhegan, commenced business recently.

One of the prettiest drug stores in Gardiner is that lately opened by W. A. Erskins, in the store formerly owned by White Brothers.

The A. O. Noyes drug store in Norway is undergoing a complete change in the way of repairs, which will be a decided improvement.

### Massachusetts Matters.

W. H. Little & Co., of Great Barrington, are building an addition to their drug store.

The firm of Godfrey & Roberts have opened their new drug store in Rust's Block, Northampton.

Frank T. Youngquist, of the firm of C. R. Hillberg & Co., of Campello, druggists, and Miss Grace W. Nickerson were married recently.

Thomas Spencer has opened his new pharmacy at the corner of Blossom and Elm streets, Bradford.

John E. Peterson, a graduate of M. C. P. '93, was married Oct. 12, at Haverhill, Mass., to Miss Jennie E. Woodman.

N. E. Nash, of Abington, has secured a situation as clerk in the drug store of S. F. Winter under the Hotel Belmont, Brockton.

John Smith, of Pittsfield, who recently bought the drug business of F. C. Blood & Co., at Chelsea, was married recently to Miss Hall.

It is reported that Joseph Bergman will soon open a drug store on Mechanic street, Clinton. Mr. Bergman is now in business in Marblehead but will move his stock.

John Murphy, of Maple street, has purchased the drug store formerly run by the late Peter Belleville, on Elm street, Milbury. He will refurnish it and run a first class store.

Joel S. Orne, of Main street, Cambridge, had a narrow escape from a severe accident while returning from the World's Fair. His train was in a collision, and the car in which he was riding was partially demolished, but fortunately the force of the concussion was spent before it reached the front of the car occupied by Mr. Orne.

Edward G. Frothingham, of Haverhill, ex-drug examiner, has succeeded in obtaining the nomination for Senator from his district; but he was compelled to make a hard fight to secure the honor. Mr. Frothingham was not opposed personally, but it was thought that the nomination should go to another section. The announcement in a contemporary that Mr. Frothingham "has gone into politics" must be very amusing to that gentleman, who would undoubtedly state, for the enlightenment of the paper referred to above, that he had been very much in politics for the last ten or twelve years. Mr. Frothingham has served two years as representative, and is at present chairman of the ward and city committee of Haverhill.

Another pharmaceutical politician who hopes to sit under the gilded dome this Winter is Eugene A. Bessom, of Lynn. Last year Mr. Bessom served his constituents

as Representative, and he has recently received a renomination and has strong hopes of again being successful. Luther L. Jenkins, of Leverett street, Boston, has received a nomination, and is making an effort to be elected to the legislature.

### Boston Budget.

Carter, Carter & Kilham have been dealing in goods not strictly pharmaceutical. The stock consists of a large quantity of swords which the Ames Plow Co. manufactured for the Turkish government, and for which the latter failed to pay.

The season has opened auspiciously at the Massachusetts College of Pharmacy and the attendance is up to the average of that of other years. The number of lady students attending the course is constantly on the increase. The school has an excellent trio of officials in President Sawyer, Secretary Williams and Treasurer Godding.

The Doliber-Goodale Co. has taken a long lease of the Central Wharf property which was formerly occupied by the J. A. & W. Bird Co. Thomas Doliber, Ph.G., president of this company, has just returned from a Chicago trip, and he brought with

him a blue ribbon (first prize), which had been awarded the successful specialty which this firm owns.

The prolonged contest over the appointment of a drug examiner for Boston has at last been settled by placing Andrew H. Ward in the much coveted position. This is Mr. Ward's second occupancy of this office, he having been appointed during President Cleveland's first administration. Mr. Ward had strong indorsement for the examinership, his papers having been extensively signed by members of the drug trade and by politicians.

Dr. Horace L. Bowker is a very busy man at the present time; he always takes a great interest in things political. The doctor is one of the foremost opponents of the Rapid Transit Bill which is soon to be voted upon. After the votes are counted, we opine that the side of the question which the doctor has championed will prevail. Mr. Theodore Metcalf also hopes for the defeat of this bill and has come out openly in expressing his opposition to it.

The October meeting of the Boston Druggists' Association was held at Young's Hotel on the evening of the 31st. An illustrated lecture by George W. Penniman upon "Chicago and the World's Fair," was the attraction which was offered to the large number of members in attendance.

Amos K. Tilden and Henry Canning also made brief speeches during the evening. The name of Edgar F. Billings, of Billings, Clapp & Co., was proposed for membership, and the name was referred to membership committee.

### Massachusetts Druggists' Alliance.

The Massachusetts Druggists' Alliance held its annual meeting at Young's on October 20 and elected officers for the ensuing year as follows: W. A. Bartlett, president; Alonzo G. Trafton, vice-president; Frank Tucker, secretary and treasurer.

Upon the occasion of the eightieth birthday anniversary of Henry Lyman, of the widely known firm of Lyman, Sons & Co., Montreal, the employees marked the occasion by presenting him with a congratulatory address.

The presentation took place at his residence, a deputation numbering some fifteen, and representing every department of the business, waiting upon him about 6 o'clock in the evening. The address, which was beautifully illuminated, was read by Thos. Boyd, chief bookkeeper and the senior member of the staff.

We have received from the New York agents of Shipkoff & Co., distillers of pure otto of roses, Kizanlik, Bulgaria, a pamphlet of some twenty-four pages containing a short history of the organization of the firm together with a concise and interesting account of the production of otto of roses. The pamphlet is an artistic and neat one printed on super-calendered paper and embellished with engravings in half-tone of the Kizanlik distilleries as well as cuts of the exhibit of Shipkoff & Co., at the World's Columbian Exposition, and of K. P. Shipkoff, founder and head of the firm. The pamphlet is the work of the William Johnson Printing Co., Chicago, and is altogether a most interesting compilation



Edward A. Hay

was born in Portland, Me., Oct. 2, 1866. His grandfathers on both sides were physicians and his father has been the proprietor of the present drug business for more than fifty years.

During school days much of his leisure was spent in the store, becoming familiar in an elementary way with drugs. He graduated from the New York College of Pharmacy in 1889. During the first Winter of the course his time outside of the college hours was passed in the store of the late Prof. Emlen Painter.

He has been in charge of the retail department of H. H. Hay & Son since his return from New York, and was admitted to the above firm in June, 1892.

He first tried advertisement writing in the Fall of 1891 in the local papers, and most of his efforts have been in an amateur way in behalf of the business of his house, though he has attained considerable reputation first through contributions on the subject of advertising in the columns of *Printer's Ink* and later through his article on advertising a drug store, which was published in the *AMERICAN DRUGGIST* for February, 1893, and for which he was awarded a prize of fifty dollars. A later contribution appeared under the title of Three Cornered Drug Stores in *General and One in Particular* in the *AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD* for January, 1893.

### New York City Items.

The Fraser Tablet Triturate Co. have purchased the tablet triturate business of B. Frank Hays.

Miss Cornelia C., a daughter of the late Prof. P. W. Bedford, has been selected to fill the important post of principal of the New York School of Cookery.

The late J. R. Caswell was referred to in our issue of last week as a member of the firm of Caswell, Hegeman & Co. This was due to the oversight of a proof-reader. The firm name should read Caswell, Hazard & Co.

F. J. E. Welch, who looks after the American depot of Blondeau et Cie., manufacturers of "Vinolia" soap, etc., left on November 8 for a trip to England, and will combine pleasure with business while away. He is expected to return early in December.

Recent visitors to New York included Chas. Goodwin, of G. C. Goodwin & Co., Boston; Harry Maris, of John M. Maris & Co., Philadelphia; B. Gould, of Gould Bros., Malden, Mass.; and J. H. Stein, of Reading, Pa.

The Gellert, which recently arrived in a damaged condition owing to the prevalence of fire on board, had a considerable quantity of drugs included in her cargo, hence the auction room will probably be called in as an aid to distribute the undesirable stock.

Dr. Frederick Hoffman, the distinguished and erudite editor of the New York *Pharmaceutische Rundschau*, has been honored during the present year by election to honorary membership in the national pharmaceutical societies of Switzerland, Austria and Russia. He has also received the award of the Flückiger medal.

### New York State Notes.

Julius Adorno, who had built up a very nice drug business, has removed his store from the corner of Evergreen avenue and Hancock street, Brooklyn, to 732 Evergreen avenue, at the corner of Van Voorhis street.

Richard P. Wall, a well known druggist of Brooklyn, doing business at 145 Rockaway avenue, became a Benedict last night. He was married to Miss Mamie Robbins, a niece of another prominent Brooklyn Pharmacist, T. M. Lahey.

John R. F. Wall, of the class of '93, Brooklyn College of Pharmacy, has returned East from an extended stay in Chicago. Like all others who have visited the White City, he finds it difficult to describe adequately the many charms of the fair which has so recently come to an end.

On November 16 there will be a civil service examination at Albany for the positions of junior assistant physicians and apothecaries in the State hospitals for the insane. Applicants for the latter must be residents of the State of New York, at least twenty-one years of age, and must have a license from the State Board of Pharmacy. The salary is \$500 to \$600 per annum and board.

### Southern Siftings.

T. S. Grumbine, who has served two years in the drug store of Ross & Co., Lebanon, has gone to Philadelphia, where he will enter the college of pharmacy.

W. G. Burgess, of Manchester Va., has accepted a position with Louis C. Wright a Petersburg druggist.

Oliver D. Collins is erecting a handsome structure on the corner of Main and Pearl streets, Snow Hill, Md., which will be occupied by Dr. Charles F. W. Hau as a drug store.

Alexander Finlay, ex-president of the A. P. A., and one of the oldest druggists in New Orleans, has opened a branch establishment in the new Medical building, No. 17 Baronne street. The new store, one of the handsomest in the city, has been furnished entirely in oak, and the counters have been beautified by insertions of cube looking-glasses. It is lighted with electricity, and the prescription department is a bijou of art.

### Nebraska Notes.

J. G. McBride, of Pawnee City, and F. L. Maddox, of the Smith Drug Co., spent a week profitably at the World's Fair.

B. W. Ganoung, M.D., lately with the Mercer Whitmore Co., is now representing the Home Medicine Co. in Nebraska.

W. L. Heilman, secretary of the Nebraska State Pharmaceutical Association, has the State agency for the Home Medicine Company of Chicago, Ill.

S. G. Wright & Co., druggists at Elk Creek, suffered a loss of about \$800 by the burning of an adjoining hardware store. The main loss was in the building; fully insured.

The dwelling house of J. B. Rippey, an Omaha druggist, caught fire from the explosion of a gasoline stove, but his wife fought the flames until help arrived, thus saving their home.

It is reported that the drug store of B. S. Smith, of Beatrice, has been closed by his brother Will Smith, of Pickrell, on a chattel mortgage of \$650. Other claims will amount to \$1,200 mostly among wholesale houses, and a claim of \$200, held by Nebraska National Bank. Mr. Smith's stock will invoice about \$1,500.

The copartnership existing under the firm name of Magenau & Brunner, druggists, in Fremont, has been dissolved by mutual consent, Otto Magenau retiring. The business will be continued by Charles H. Brunner, who will pay all debts owing by the firm and to whom all accounts due the firm are payable.

Crops in Southern Nebraska are above the average and druggists are in excellent spirits and are looking for a big trade as the holiday season approaches. Traveling men report trade picking up and taking of large orders to replenish the stocks that had run down during the financial depression and absence of proprietors at the Fair.

### Western Notes.

Dr. T. J. Grayson is about to open a new store at St. Francesville, Ind.

A Mr. Young, formerly of St. Joe, has charge of Myer's pharmacy at Carlisle, Iowa.

Burglars blew open the safe of Sperling's drug store at Belvidere recently and secured \$40. They used dynamite.

R. C. Winslow, of West Branch, Wis., and Miss Leila McGowan, of Ogemaw County, were married on Oct. 26.

J. H. Ferris' store at Carthage, S. D., was entered and robbed last November and the supposed thief has just been arrested.

Stephen P. Fitzgerald, a prosperous druggist of Oskaloosa, Ia., and Clara A. Flood, of Keokuk, were married recently.

Meyer Bros.' Drug Company have commenced an attachment against Earl D. Gray, of Salt Lake City, Utah, to collect \$501.96.

The drug store of George Kieffer at 620 Lorain street, Cleveland, O., was entered recently by burglars. The attempt to rob was unsuccessful.

Three drug stores in Independence, Ia., were recently entered by burglars. They were those of C. R. Wallace, B. W. Tabers and Geo. Smales.

The safe in J. W. Brant's drug store at Hayesville, Ohio, was blown open by burglars recently and about \$500 taken, including township funds.

City Chemist R. R. Hunter, of Kansas City, Mo., has resigned to engage in private business. The salary for the position, which is still vacant, is \$1,200.

B. F. Buchanan, a druggist of Harrisville, Mich., has sold out to H. F. Colwell and Dr. D. W. Mitchell. Mr. Buchanan will remove to Rising Sun, Ind.

It is reported that the drug store of G. J. Sadler, Duluth, Minn., has been closed by G. R. Newell, of Minneapolis, on an execution. The liabilities are \$3,000.

James R. Clark, formerly of Plattsburgh, Mo., has purchased the Opera House drug stock at St. Joseph, Mo., which will be known in future as Tootle Theatre Pharmacy.

The Father Lebreton Eye-water Company has been incorporated at Indianapolis, Ind., and has a capital of \$10,000. The directors are Herman Alerding, Elias V. Lebreton, William Lebreton.

Andrew Sexton, a prominent citizen and one of the firm of Sexton Bros., druggists, Marshfield, Wis., and Miss Ida Doern, were married on October 25, at the residence of the bride's parents.

A druggist at Ashland, Wis., has made his show window a study of toxicology. Gum opium is displayed, its various forms as opiates are shown, and also the antidotes. The scheme was a success as an advertisement.

Baldwin Bros., druggists of Jamestown, N. D., have been sued in the district court by Louis E. Russell, Gordon Russell and Benjamin Russell, for selling liquor in violation of the prohibition law. Damages aggregating \$6,000 are asked.

A Chicago druggist has been arrested for selling poison to a minor. The charge was brought against him by a notoriety-loving evening newspaper which started out to make a sensation and apparently succeeded. The case has aroused considerable comment in Chicago and the State Board of Pharmacy has taken action in the matter.

Early in the evening of Oct. 28 J. F. Cappell's drug store, at 741 Mississippi street, St. Paul, Minn., was entered by two men wearing silk masks over their faces. Mr. Cappell and James Reed were relieved of money and valuables at the point of revolvers. A \$50 gold watch and a gold scarf pin were taken from the proprietor and several dollars in money from the money drawer. Mr. Reed had nothing with him, and consequently lost nothing. After securing all valuables in sight, the robbers backed out of the store and locked the front door, taking the key with them. Some time elapsed before the men in the place could get out and notify the police.

Geo. B. Bower, who has for many years acted as official stenographer for the National Wholesale Druggists' Association, has been appointed secretary to the committee on proprietary goods, an office created at the last meeting of the association.

### Cut Prices in Cleveland.

The druggists of Cleveland have been forced, by the general "bazar" stores, to reduce the price of patent medicines. One of the largest and most important meetings ever held by the Cleveland Pharmaceutical Association took place at the rooms of the association on October 16. Fully forty members were present, and from 8 P.M. to 10 P.M. they debated the proposition of whether or not the fact that certain merchants selling patent medicines at reduced prices, as a kind of addition to their regular business, would force the druggists to also reduce the prices. Several druggists who were present hotly combated the reduction, but the majority of those in attendance contended that the thing must be done as a necessary business move. One of the druggists said to a reporter after the question had been decided: "We have been forced to do this against our will by the merchants not in the drug business who have been selling patent medicines at reduced prices in order to attract people to their stores. Of course we have to go on just the same paying the wholesaler his regular price." Patent medicines which have hitherto sold for \$1 will be reduced to 65 cents, and other reductions are from 50 cents to 35 cents, and from 25 to 14 cents. In one case a patent medicine which has been selling for \$1.25, will be reduced to 85 cents. After the final decision was reached the druggists remained some little time arranging the new schedule of prices.

### Trouble in St. Louis.

The executive committee of the St. Louis Apothecaries' Association met at the College of Pharmacy to consider the circular recently sent out by the wholesale druggists of St. Louis with regard to the taking of orders and the delivery of goods.

After considerable discussion it was decided that the matter was not of sufficient importance to warrant the calling together of the association. There is some dissatisfaction among retailers with the circular, but the committee thought best to leave the action to individual dealers in each particular case.

### Alumni of the St. Louis College of Pharmacy.

The Alumni Association of the St. Louis College of Pharmacy celebrated its eighteenth anniversary at the college on October 17. About 150 of the association and their friends were present and were provided with a feast for the mind as well as for the body.

The alumni has for its president J. C. Falk, M.D., and Henry Stark and Charles A. Lips for secretaries. It numbers 242 members.

The programme opened with an address of welcome by the president, in which he briefly sketched the history of the organization. He was followed by Mayor Walbridge in a happily worded speech. Dr.

Hinrich delivered a lecture on the "Weights of the Chemical Elements," which was well worth more careful thought than the merry party could give it on the occasion.

The fun of the night was reserved for the last. W. D. Hussung, a local celebrity, gave several character sketches, interspersed with pantomime, which was much enjoyed.

After the programme the guests repaired to the dining hall, where an elegant banquet was spread.

The toasts were: "The Alumni Association," Charles Geitner; "The St. Louis College of Pharmacy," Solomon Boehm; "The Medical Profession," Dr. O. E. Trentler; "The Pharmaceutical Press," Dr. F. L. James; "The Ladies," Dr. Otto A. Wall.

### Alumni of the N. Y. C. P.

The Alumni Association of the N. Y. C. P. met Wednesday a week ago in the College quiz rooms, when the matter of a monthly periodical to be devoted to the affairs of the Association was brought up for discussion by the president, Herman Graeser. On motion the president was authorized to appoint a committee on publication as well as to make final arrangements toward securing an editorial staff.

The resignation of J. C. Nielsen, secretary, was received and acted upon. Mr. Nielsen has been obliged to give up the office on account of removal from the city. He has accepted a position at Sag Harbor, New York. The election of a secretary was then taken up, and N. D. Phillips of '91 and Harry Heller of '93 were placed in nomination. A vote was taken which resulted in the election of the last named by a majority of four votes.

Fred Hohenthal and Alfred Stover both took an active part in the proceedings and contributed a good deal toward making the meeting an interesting one. Among new members elected at this meeting was William Hoburg, Jr., president of the class of '93, who is now with Fraser & Company, of Fifth avenue, New York city.

### Boards and Colleges.

The Pharmaceutical Society of St. Petersburg is in the seventy-five year of its existence. It has 75 honorary, 160 ordinary, and 50 corresponding members.

The Cincinnati section of the American Chemical Society met on October 15 and heard a paper by Prof. Norton, of the University, on the use of aluminum vessels, and one by Prof. Schmidt, the city chemist, on tyrotoxin.

VIRGINIA BOARD.—At a meeting of the Board held in Lynchburg, Oct. 23, the following parties passed satisfactory examinations and were granted certificates as licentiates: R. Lundy Pentz, Danville; W. R. Suddaby, Danville; V. O. Bendall, Lynchburg; J. F. Gordon, Richmond; D. S. Carraway, Clifton Forge; D. M. Calhoun, Richmond; Paul Fleet, Lynchburg; W. A. Taylor, Blackstone; P. H. Casey, Lynchburg; E. B. Muse, Blackstone; C. R. Hunter, Richmond; H. R. Johnston, Lynchburg; James R. Collins, Bowling Green; H. I. Sullivan, Big Stone Gap.

NEW HAMPSHIRE COMMISSION OF PHARMACY.—The annual meeting of the Commission of Pharmacy was held at Manchester on Wednesday, October 25. The board organized with Dr. Chas. A. Tufts, of Dover, president; Geo. F. Underhill, secretary and treasurer, and Dr. Edward H. Currier, auditor. The meetings of the board will be held quarterly on the fourth Wednesday in January, April, July, and October at Manchester and Concord. The following named candidates passed a successful examination: Senior: Leonard J. Pastor, of Boston, Mass., and Herbert E. Rice, of Hinsdale. Junior: Geo. H. Sanborn, of Concord; Walter A. Chipman, of Manchester.

THE MINNESOTA BOARD OF PHARMACY met at St. Paul on October 17 and examined thirty-four candidates, one of whom was a lady. H. O. Frank, of Milwaukee, has been appointed a member of the Wisconsin Board of Pharmacy to succeed the late R. D. Pulford, of Mineral Point.

The board has revoked the license of Chapin S. Draper, a druggist in business at Wells, Minn., on the grounds of incompetency. This is said to be the commencement of a crusade which it is intended to carry on against such druggists of the State as are violating the State pharmacy laws to the detriment of the profession of pharmacy and danger to the lives of the public by having unqualified persons to act as dispensers.

BROOKLYN COLLEGE.—A pharmaceutical meeting was held at the college buildings on October 10, this being the regular monthly meeting of the college and society. The meeting was presided over by President Brundage. After the dispatch of some routine matters, Luther F. Stevens read a paper on modern iodoform. The paper was illustrated by a series of experiments showing the various steps in the manufacture of iodoform, according to the latest methods. At the conclusion an interesting discussion of the paper occurred, which was participated in by Prof. H. W. Schimpf, Prof. W. P. DeForest, Dr. Sheets, Mr. Muir, Dr. Brundage and others. The next meeting will be held at the college building, at 2.30 P.M., on Tuesday, November 14, and all members of the society and others interested are cordially invited to attend.

### Tables of the New Pharmacopoeia to be Issued Separately.

At the suggestion of a number of purchasers of the new Pharmacopoeia, the Committee of Revision has decided to issue, as a separate publication, those of the Tables appended to the work which are most generally consulted. These tables will appear under the title: "Select Tables from the U. S. Pharmacopoeia (1890), Reprinted for Ready Reference in Daily Practice. Published by the Committee of Revision," etc. The tables will be printed on single sheets (one page on a sheet), on one side of the paper only, suitable for being mounted on cardboard, so that they may be hung up at the dispensing counter, or in the laboratory.

The set will comprise all of the tables, except those showing specific gravity and percentage of acids and alkalis. They will be published at the retail price of 25 cents, at which price they can be obtained at this office.

## On "Great Offers."

The custom of certain firms of "sarsaparilla" makers and "little liver pill" men of advertising special offers to induce the retail druggist to dispose of their calendars and incidentally, of course, their peculiar compounds, has prompted an esteemed correspondent to submit the following:

OFFER NO. 1.  
OFFICE OF THE  
N. G. MFG. CO., HARLEM, NEW JERSEY.  
*Our Great Offer.*

*Messrs. Getthare & Co., Druggists, Haytown.*

DEAR SIR: If you order one gross of our "Flim-flam Extract" we will allow you to give away 100 of our calendars, by which you can advertise our wonderful preparation. With two gross we will send you 200, etc., etc.

Very truly yours, THE N. G. MFG. CO.  
P.S. As the druggists are falling all over each other in their frantic efforts to help advertise our goods, you will do well to order at once.  
THE N. G. MFG. CO.

OFFER NO. 2.  
GETTHARE & CO.,  
DRUGGISTS, HAYTOWN.  
*Our Great Offer.*

*To the N. G. Mfg. Co., Harlem, N. J.*

DEAR SIR: Your liberal offer received. In return we will make you an offer—to wit: If you will send us one gross of your extract gratis, we will take 100 of your calendars for distribution. With two gross (at the same price) will distribute 200 calendars, etc., etc. The "Red" Fire Insurance Co. have offered us better inducements, but we give you the preference.  
Very truly yours,

GETTHARE & CO.  
P.S. As we are very busy getting out our own extract, which we sell at a little more than dry goods store profit, you will do well to answer at once.  
GETTHARE & CO.

## The Reading Man the Successful Man.

That man is strongest as a merchant who is the best posted. He cannot keep in touch with the world without reading, and, as this is the age of the specialist, he must read that class journal which makes a specialty of gathering news from the four corners of the globe for his benefit. Every commercial exchange appreciates this to the extent of spending large sums in the collection of statistical news. Many publish this in elaborate daily circulars. There are members of these exchanges as well as subscribers of trade papers who erroneously believe that if they keep posted, and their competitors are kept in ignorance of trade news and facts, that it will be easier for them to make money. Innocently they work to place obstacles in the road of success. It is the ignorant trader who knows little or nothing about the cost of the service, and therefore becomes a reckless cutter.

The trade journal never tires of giving practical hints about store service; knowledge of the goods handled by the trade; facts and figures governing supply and demand, and a thousand items of direct value to its constituents and such as are not ordinarily found in the daily newspapers, especially since they are being edited upon the theory that all adults need to be amused with pictures quite as much as children.—*American Grocer.*

## Obituary.

Lorenzo Augustus Baldwin died at his home, 123 East Hardin street, Findlay, O., on October 25 after several years' affliction with spinal trouble, in the fifty-seventh year of his age. Mr. Baldwin was for a while engaged in the drug business, though he had gone into other pursuits of late years.

J. J. Hallisey, of Nashua, N. H., died on October 30 at the age of twenty-eight. The deceased was born in Nashua twenty-eight years ago next December. He was educated in the public schools, graduating from the high school in 1884. He acquired his knowledge of pharmacy in Lovering's drug store in Nashua and passed examinations for registry both in New Hampshire and Massachusetts. More than a year ago he established a drug business for himself in Spalding's block, and built up an encouraging business. He served for a time as deputy sheriff of the county, and held the office of ward clerk and selectman. He leaves two sisters, with whom he lived, and one brother, D. J. Hallisey.

FREDERICK M. RUSSELL.

Frederick M. Russell, proprietor of the People's Drug Store in Burnside, Conn., committed suicide on October 31 by shooting himself with a revolver. He died almost instantly. For some time past Mr. Russell had been in ill health, and this in connection with the dullness of business had made him despondent.

On the morning of the 31st he went to his store, which is located on Church street, Burnside, and entered the store without speaking to his clerk, John Griffin, a boy about 16 years old. This was an unusual thing, as Mr. Russell was of a genial disposition with a pleasant word for everybody.

Shortly after 9 o'clock he left the store and went to a barn in the rear, and a few minutes later T. J. Connelly, who was working in a field near by, heard the report of a revolver. He paid no attention to it, thinking it was made by the stamping of a horse in the barn. A few minutes later he heard a woman's scream and rushing to the barn he found Mrs. Russell bending over the body of her husband.

There was an ugly wound in his right temple from which the blood flowed freely. By the time that Connelly reached the barn Russell was dead. A crowd quickly collected and Medical Examiner Griswold, of East Hartford, was summoned. The revolver with which he shot himself was a Smith & Wesson 32-caliber. There had been two cartridges in it, one of which caused the death.

Mr. Russell was about 40 years old and was well known in Hartford. He learned the drug business in that city and was for some time druggist at the Retreat for the Insane. He had a drug store in Glastonbury and about three years ago started in business in Burnside. He leaves a wife and two children.

## Recent Drug Fires.

J. T. Stoddard, Jonesboro, Ark., loss not stated—Adair Bros., Muncie, Ind., burned out—H. Weyle, Wymore, Neb., loss \$200, fully covered—H. A. Bradley, King City, Neb., fully insured—Henry Ostroff, Central avenue and Ninth street, Indianapolis, Ind., small blaze, damage trifling—Howenstein & Co. and P. M. Pfeffer & Co., Parkersburg, Ia., total loss—C. W. Windsor, Wellsburg, W. Va., damage \$1,500—J. W. McCaffry, Berkely Springs, Va., loss \$3,200 for building and stock; insurance \$3,000—Frame Drug Company, St. Joseph, Mo., damage \$1,500—Gaddis' drug store, Dunbar, Pa., loss \$40,000—Adair Brothers, Portland, Ind.,

loss \$8,000—W. B. Fullerton, Toronto, Ont., loss not stated.

Where Cutters Obtain Supplies.  
To the Editor AMERICAN DRUGGIST.

DEAR SIR: My attention has been called to the editorial in your issue of the 2d inst., discussing the statement that was made at the meeting of the N. W. D. A. to the effect that cutters in some instances obtained their supplies from retail druggists. You ask the question whether the "association is prepared to maintain for a moment that the late Economical Drug Company of Chicago was dependent upon a retail drug firm in good standing for its supply of the many standard proprietaries which it disposed of at so much of a cut from the regular prices."

This statement, as I recall it, was made during the discussion by a representative of the retailers.

Although not made by me, I happen to be in position to be able to answer your question, and think it is but fair that it should be answered in a public manner.

The concern in Chicago to which you refer has obtained, I believe, the principal portion of its supplies from the wholesale patent medicine dealer in Cincinnati, who has not for some years been able to obtain rebated proprietary medicines direct from manufacturers.

In the investigation as to where the supplies of this firm come from, it has been found that almost invariably they are furnished by retail druggists who have some jobbing business, who purchase the manufacturers' largest quantity, retain a small portion for their own sales, and turn the balance over at about cost to the Cincinnati concern referred to.

Therefore, while the Economical Drug Co. has not been supplied direct by this class of dealers, it is a matter of record that it has done so indirectly for some considerable time past. To substantiate the correctness of this statement it is only necessary to examine the list of creditors of the Economical Drug Co. of Chicago as recently published.

Who in that list was the principal merchandise creditor and from what source did this creditor get his supplies?

Yours very truly,

M. N. KLINE,  
Chairman N. W. D. A. Committee on Proprietary Goods.  
PHILADELPHIA, NOV. 6.

## Russian Beet Root Sugar Industry.

The *Gnjaz nad* states that a report has recently been issued by the bureau of Russian sugar refiners upon the condition of the beet root plantations on June 1 last. According to this report the plantations have an area of 312,174 deciatines (deciatine equals 27 acres) as compared with 279,919 deciatines on June 1, 1892. The cultivation has largely increased in the provinces of Kiew, Podolia, Kursk, and Kharkow.

LITTLE MABEL (to druggist)—"Please, sir, have you dot anyfin dat's good for havin' swollered five cents?"

"Do you use condensed milk?" "Guess so. The milkman can put a quart of it in a pint jar."—*Puck.*

### A Stimulant to Trade.

With the object of stimulating the public to patronize druggists, the E. L. Patch Co., Stoneham, Mass., are putting out a series of attractive cards and posters bearing in printed characters of large size the laconic command "Stop that hack." This refers to their compound coltsfoot tablets, which retail at 10 cents, for which the E. L. Patch Co. already report a large demand from druggists.

### Awards to Frederick Stearns & Co.

The Committee on Awards of the World's Columbian Exposition has awarded medals and diplomas to Frederick Stearns & Co., wholesale and manufacturing chemists, Detroit, for the following specialties: 1. General display of pharmaceutical products. 2. Gelatin and sugar coated pills. 3. Assayed fluid extracts. 4. Pike's pepsin. 5. Compressed tablets and lozenges. 6. Ointments and cerates. 7. Pure powdered drugs. 8. Hard and soft filled gelatin capsules. 9. Medicinal syrups. 10. Granular effervescent preparations. 11. Stearns' cascara aromatic. 12. Stearns' wine of cod liver oil with peptonate of iron. 13. Perfumes and toilet articles. 14. Non-secret preparations.

### Awards for Chocolate.

Walter Baker & Co., Dorchester, Mass., have received from the judges of the World's Columbian Exposition one of the highest awards on each of the following named articles contained in their exhibit: Breakfast cocoa, No. 1 chocolate, German sweet chocolate, vanilla chocolate, cocoa butter.

The judges state in their report that these products are characterized by excellent flavor, purity of material employed, and uniform even composition, indicating great care in point of mechanical preparation.

### Medicinal Fluid Extracts.

A formulary list and catalogue of the medicinal fluid extracts manufactured by John Wyeth & Brother, Philadelphia, has been recently published by the firm. The book is gotten up in text book style, bound in cloth, and contains in connection with each fluid extract exact and reliable formulas for the extemporaneous preparation of tinctures, decoctions, infusions, ointments, etc., which some are of opinion may be made with far greater economy and yielding a more uniform and satisfactory product than if prepared from the crude drugs themselves.

A valuable feature of this little work which will be convenient for immediate reference is the botanical index alphabetically arranged (pages 249 to 256 inclusive) giving both the scientific and common names of the drugs. The metric equivalents are embodied in all the formulas, not only as to doses but in the preparation of the various tinctures, decoctions, infusions, syrups, etc.; this we think will add much to its value.

The little work has evidently been prepared with much care and at considerable expense, and should be influential in directing greater attention to the fluid extracts

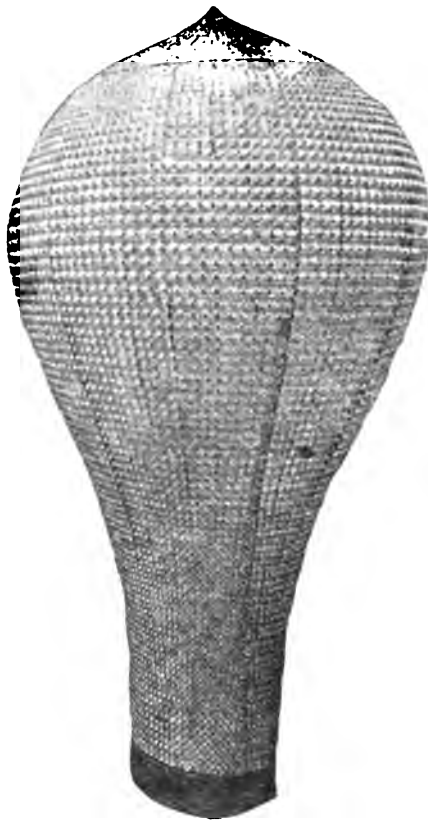
manufactured by the firm. It is not too much to say when the extraordinary care exercised in the selection of the crude material and its subsequent manipulation is considered, that the fluid extracts of John Wyeth & Brother may be accepted as uniformly representing to the fullest extent the medicinal and remedial virtues of the various drugs employed.

### Columbian Award.

We are informed that W. R. Warner & Co., of Philadelphia, have obtained the highest prize for the purity and perfection of their medicinal and official standard pharmaceutical and chemical products.

### An Immense Prismatic Bulb.

A feature of exceptional interest in the electricity department of the World's Columbian Exposition was a large prismatic bulb surrounding a column of great



length and proportions. The bulb was ten feet high and composed of 40,000 crystal prisms which took eight men five weeks to place in position. An idea of its general appearance may be gathered from the accompanying illustration.

The bulb was the work of F. McLewee & Son, of New York city, who make a specialty of the manufacture of illuminated glass and crystal prismatic signs as well as gas, electric and oil fixtures for drug stores.

To those who are contemplating the erection of the time honored drug store sign, the different circulars containing descriptions of the special designs of illuminated mortars will be of particular service, and we would advise all such to communicate at once with F. McLewee & Son, 25 Waverley place, and 251 to 253 Greene street, New York city, mentioning this paper.

### New York Branch of the Low Art Tile Company.

Druggists in the vicinity of New York city who may desire to inspect some really fine specimens of the Low Art Tile soda fountains should pay a visit to the newly opened salesrooms of the Low Art Tile Co. on Church street near Cortlandt street, this city. This branch establishment is in charge of G. M. Howell and J. A. Sangston, who extend cordial invitations to the druggists of New York, New Jersey and Long Island to make the place their headquarters when visiting the New York drug market. The new salesrooms are conveniently located near the termini of all the important railroads, are easy of access by elevated and surface cars, and only one block west of Broadway.

### Oleocresosote.

For consumptive patients some practitioners have recommended creosote, or its active principle guaiacol, dissolved in oil and administered either by the mouth or by hypodermic injection. But large doses are not tolerated and produce toxic symptoms like those produced by carbolic acid.

To avoid these effects Dr. Diehl has combined creosote with oleic acid and obtained thus an oleic ether of creosote which he has called oleocresosote. (*Revue Medicale de la Suisse Romande*, 20th Feb., 1893.)

This compound is a yellowish oily substance, containing 33 per cent. of creosote (or guaiacol), having a characteristic flavor, reminding us of that of creosote, but having no caustic action on the tongue. It is quite insoluble in water, and only slightly soluble in alcohol, but dissolves in ether, chloroform, etc., and in fatty oils.

By means of gum arabic, or yolk of egg, it can easily be made into an emulsion with water, which is an agreeable way of giving it. In passing through the system it splits up into creosote and oleic acid.

Oleocresosote is manufactured by E. Von Heyden's successors, Radebeul, near Dresden, and is to be obtained in the United States from the sole agents, Schering & Glatz, Maiden lane, New York.

"I don't want any castor oil," said a sick Boston boy, petulantly, "and I won't take it."

"Why, Horace," expostulated the mother, "don't you know that castor oil is made from beans?"

And the little boy whose faith in his mother is perfect, took the dose, and feebly asked for more.

The retreat of Lo Bengula, king of the Matabeles, towards the Zambesi River, after his defeat at Buluwayo by the chartered company's forces, directs attention to the great commercial value of the lower Zambesi, a section which will probably now be more systematically opened up. While the Portuguese control the coast territory extending northward from the mouth of the Limpopo River to some distance above the mouth of the Zambesi, the latter river is free to all commerce. Along the Zambesi is found a fertile country whence can be obtained large quantities of india rubber, indigo, beeswax, archil, calumba and oil seeds.

Through the misplacing of a paragraph in our issue of October 26 a reference to the exhibit of Seabury & Johnson in the World's Columbian Exposition appeared below the name of a firm exhibiting microscopes, instead of further on beneath the caption Seabury & Johnson.

## NOTES ON PRICES.

### Package Prices.

In the prices current of Wm. H. Raser, drug broker and commission merchant, 32 Platt street, New York, issued under date of November 1, the month is referred to as opening with a fair jobbing business; with few exceptions the market values of drugs are decidedly firm and some articles advancing. *Opium* is an exception and is weak and sagging. Single cases are to-day readily obtainable at \$2.50 and this price could probably be shaded. Five case lots are quoted at \$2.47½ and it is intimated that a cash buyer could do even better. Broken parcels quoted at \$2.52½ and possibly \$2.50 would buy in 50 cent lots to-day. *Pure Powdered Opium* \$3.25 and in 25 and 50 cent lots at \$3.20. *Quinine* there is a good and steady demand for and outside holdings are much less plentiful than they have been, and 19½ @ 19¼c. are now the lowest offerings of German bulk, while some are asking full up to manufacturers' price of 20c., especially for B and S brand, which is quite scarce in outside hands. An advance by all manufacturers before long seems not improbable. *Arnica Flowers* are tending higher. *Balsam Copaiba* higher. *Balsam Fir*, Canada, firm at recent advance to \$3.24 in bbls. It is very scarce. *Oregon Balsam* is unchanged. *Cacao Butter* tending higher. *Cubeb* declining. *Cuttle Bone*, Trieste, in straps at 10c. *American Saffron* advanced to 32c. for bales, 33c. for bbls. and 34c. for less. *Golden Seal* firmer at 22 @ 23c. and more asked. *Senega Root* higher at 42½ @ 45c. with some rather inferior to be had at 40c. *Serpentaria* advanced, 25c. now generally asked with a higher tendency. *Ginseng Root* is scarce and advancing with a better demand. *Manna*, small flake, some new and prospective arrivals unsettling values and down to 34 @ 35c. is now named. *Shellacs* in fair demand and firmer. *Tragacanth*, Aleppo, have been declining of late but are firmer again. *Gums*, Arabic and Senegals, in fair demand but unchanged. *Celery Seed* advanced, 20c. asked and by some holders even more wanted, but 19c. will still buy. *Canary Seed* firmer. *Russian Hemp* continues scarce on spot, but liberal supplies are soon due here. *Dutch Canary* is lower. *Japan Wax* is firmer though not quotably changed. *Mustard Seeds* lower. *English Vermilion* reduced to 53 @ 54c. *Nitrate Silver* marked down. *Gambier* and *Cutch* are easier. *Sal Soda* is lower. *Spices*, Cassia, in mats advanced to 7¼ @ 7½c. *Jamaica Ginger* advanced. *African and Race Gingers* unchanged but firm. *Allspice and Saigon*, Black Pepper, are lower. *Cloves*, Mace and Nutmegs are unchanged. *HGH Oil Peppermint* is higher. *Sanderson's Lemon* declined. *Cassia* advanced. *Anise*, *Wintergreen* and *Sassafras* unchanged. *Sperm Oil* declined. *Whale Oil* easier.

### Chemicals.

In their trade circular dated November 1, Roessler & Hasselacher Chemical Co.

Oils and Salts are somewhat The coal strikes prevailing in main have quite considerably d the raw material, benzole,

and although we do not look for excessive advances in the prices of the finished products, the firmer tone so far noted is likely to continue.

*Benzoic Acid* continues firm; prices remain unchanged.

*Bicarbonate of Potash*. Our quality meets the requirements of the U. S. P., and buyers should not fail to consider this point when comparing prices.

*Carbonate of Ammonia* is higher in price and scarce. We have only limited quantities to sell on spot, but can quote from shipments now on the way.

*Hypsulphite of Soda*. The good demand in this article has considerably reduced stocks both here and abroad, and an improvement in prices is apparent.

*Quinine*. The situation continues to improve.

*Sodium Peroxide* (Na<sub>2</sub>O<sub>2</sub>) on account of its high percentage of available oxygen (19½ to 20 per cent.) deserves and has found great attention, not only as an oxidizer for bleaching purposes but also as a powerful reducing and oxidizing agent in analytical work and for manufacturing purposes. By adding Na<sub>2</sub>O<sub>2</sub> to water and acid in suitable proportions, hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>) of any desired strength is obtained. Unlike commercial H<sub>2</sub>O<sub>2</sub>, which easily decomposes into water and inert oxygen and primarily contains in ten volumes strength less than 1½ per cent. of available oxygen, sodium peroxide in powdered form furnishes a stable product which is easily preserved for any length of time. That Na<sub>2</sub>O<sub>2</sub> converted into H<sub>2</sub>O<sub>2</sub> changes sulphide of lead into the sulphate; reduces the oxides of gold, silver, etc., to the pure metals is well known. A more recent application of sodium peroxide is its use in the purification of alcohol. Full particulars in special circular.

## Review of the Wholesale Market.

NEW YORK, November 7, 1893.

It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.

The business transacted in drugs, dye-stuffs and chemicals during the week under review has been above the average volume and the prospects for the Fall and Winter trade are now regarded by many in the trade as bright and encouraging.

As it is not usual, however, for interior dealers to make large stock selections during the closing months of the year, an increased distribution is not anticipated. Prices are steady as a rule, with few important changes to announce. Silver salts are lower. Quinine is firm with an upward tendency. Senega root is easy and the same may be said of Ergot. American saffron is higher.

Celery seed is firm at the advance. Ether has been advanced by one of the leading makers. Oils bergamot, sweet almond, lemongrass, pimento, eucalyptus and cubeb are easier. Opium dull and weak.

### DRUGS.

ARNICA FLOWERS are cabled higher from abroad, but this market is uninfluenced and purchases can yet be made at 11c.

BALSAM COPAIBA has been in fair moderate demand, but trade is checked by scarcity of the drug. From the hands of importers sales have been made at 31c.

BALSAM FIR, Canada, is in moderate demand, with business at \$3 @ \$3.10, though some in the trade are unwilling to shade \$3.25 for single barrels. Oregon offers at 70c. per gallon.

CACAO BUTTER continues quiet at the quoted range. Some 90 tons were offered yesterday at the public sale in Amsterdam and about 40 tons in London.

CAFFEINE continues to offer from the hands of importers at \$2.25, though the price from second hands is nominal at \$1.95 @ \$2.05.

CHAMOMILE FLOWERS, best Roman, are offered at 18c., and we are reported small sales at this figure. Prime old are offered at 15c.

COD LIVER OIL, Norwegian, is in good seasonable demand and held at \$18.50 @ \$22.

DAMIANA LEAVES yet offer at 16c., but the demand is small and unimportant.

ERGOT is somewhat unsettled owing to freer offerings. In a jobbing way German offers at 26 @ 27c., and Spanish at 32 @ 35c.

GUARANA is in better inquiry for consumptive purposes, and \$1 is now quoted regular.

JUNIPER BERRIES continues in moderate demand with the current sales at 2 @ 2½c.

MANNAS, have declined in the interval, and small flake now offers at 35 @ 37c. as to quantity.

Large quoted at 85 @ 90c., and sorts at 28c.

MENTHOL, Japanese, continues scarce, and held at \$4 @ \$4.10.

OPIUM continues weak and neglected, there being no disposition manifested by any in the trade to handle large quantities or encourage speculation, the tendency on the contrary is toward caution in buying, and the market, in consequence, has a tame appearance; \$2.47½ will now be accepted for single cases, and it is thought that this figure could be shaded upon a firm bid. The jobbing value has receded to \$2.5 @ \$2.52½, but powdered is unchanged from \$3.25 @ \$3.30.

QUININE continues actively inquired for and the tone of the market is strong and buoyant, the stock in second hands rapidly becoming depleted and manufacturers are taking precautions to prevent any future speculation on the part of outside operators; the indications thus pointing to a further strengthening of the statistical position of quinine. At this writing foreign brands are held at 19½ @ 19¼c. regular.

SAFFRON, American, is maintained firmly at the recent advance to 32 @ 34c.

SOAP, Contil's white, continues in demand and sales are making of recent arrivals at 10 @ 10¼c. For forward delivery 9½ and 9¾c. is quoted.

ST. IGNATIUS BERRIES are scarce and values are nominal—say 23 @ 25c.

### DYESTUFFS.

CUTCH has been in moderate demand during the week, with the current sales of SM at 4½ @ 5c.

GAMBIER is in better demand and firmer, and the current quotations remain 4 @ 4¼c., the latter for jobbing parcels.

INDIGO is in improved statistical position and firm at previous prices.

NUTGALLS have ruled quiet during the week and are held as before.

SUMAC, Sicily, for forward shipment is held at an advance, the quotation now named being \$68 @ \$72.50 as to brand and quantity. The spot price remains \$70 @ \$75.

### CHEMICALS.

ACETIC ACID is dull and neglected though without quotable change in price.

ARSENIC, white, is in moderate request and firm at 3½ @ 3¾c. as to quantity and brand.

BICARBONATE SODA continues in fairly

active request with the sales of domestic at 2.9c. @ 3c. and English 3½ @ 3½c.

BLEACHING POWDER is inactive with the market easy from second hands. French yet offers at \$1.95 and English at \$2.10.

CHLORATE OF POTASH is quiet, with the range 14½ @ 15c. for German and English.

CITRIC ACID does not vary either in demand or price.

ETHER has advanced in sympathy with alcohol, and by some makers is quoted 56c. for U. S. P., 60c. for washed, and 63c. for concentrated. Others are, however, prepared to accept orders at the old prices, say 54c., 58c. and 61c. respectively.

NITRATE OF SILVER has been reduced in sympathy with the metal. We quote the current range.

NITRATE OF SODA is not inquired for to any extent, but values are not affected, and we quote the range at \$1.90 @ \$1.95.

SAL SODA is in moderate demand with the sales of English at \$1 @ \$1.05, and domestic 90 @ 95c.

TARTARIC ACID is dull at nominally unchanged values.

#### ESSENTIAL OILS.

ANISE remains at nominally \$1.40 @ \$1.45, with, however, only small sales.

CASSIA is well sustained at 80 @ 85c. with a moderate distribution at this range.

LEMON, Sanderson's, continues to offer at the recent decline to \$1.80, though the concession does not appear to have stimulated action materially. Down to 95c. is quoted for inferior grades.

PENNYROYAL is quoted \$1 for domestic, but trade requirements for the time are extremely small.

PEPPERMINT is meeting with a fair inquiry for consumptive purposes and bulk has sold freely at the range of \$2.20 @

\$2.40 as to quality. The quotation for HGH remains nominally at \$2.60 @ \$2.65, though no quantities can be obtained at this range.

SASSAFRAS is well sustained at the previous range with a continued fair demand.

WINTERGREEN is quiet at unchanged prices.

#### GUMS.

ALOR, Curacao, has been in active request for export and we are reported sales of fully 500 boxes at 2¼ @ 2½c. The market is quoted firm at 2½ @ 3c. as to quantity.

ASAFETIDA is in good consumptive demand with the more desirable grades bringing 22 @ 25c.

CAMPHOR is quiet and unchanged at 45 @ 46c. for refined in barrals and cases respectively.

CHICLE has sold largely during the week, some 40,000 lbs. passing out at 22½ @ 23c. The last figures are now quoted regular.

GAMBOGE has sold quite liberally of late on p. t. The regular quotation remains 52 @ 54c.

SHELLAC continues dull, but holders regard the statistical position as favorable, hence are working in harmony as to prices. Calcutta advices continue to reflect a rising tendency. We quote the current range on another page.

TRAGACANTH is receiving scant attention at the moment. A sale is reported of 10 cases low grade Aleppo at 28c. The general asking price for similar quality is 30c.

#### ROOTS.

ACONITE, German, continues to realize 9 @ 14c. as to quality. The present stock is somewhat reduced.

ALKANET has been inquired for and we note recent sales of 1,000 pounds at 6c.

GINSENG meets with fair attention, the current arrivals being taken up for export at the range of \$2.50 @ \$3.25.

GINGER, Jamaica, is in light supply and values show a hardening tendency. Bleached held at 16 @ 18c., and unbleached 15 @ 17c.

GOLDEN SEAL is maintained in strong position at 21 @ 22c. The stock available at the inside price is small.

IPECAC remains quiet, though prices are not quotably lower; \$1.15 @ \$1.20 is regarded as the range as to quality.

LOVAGE has sold in large quantities in the interval at 50c. Forward shipments are quoted 21c.

SARSAPARILLA, Mexican, is scarce and quotations nominal.

SENEGA is very scarce, and the market appears firm upon the basis of full previous prices.

SNAKE, Texas, is in very small supply, and as a result the price has been advanced to 26 @ 28c.

#### SEEDS.

ANISE, New Italian, is held at 10½c. spot.

CANARY, Smyrna, is in improved jobbing demand with the sales at 2¼c @ 2½c.

CARAWAY, Dutch, continues held at 6½c. though the current demand is small.

CELERY is firm at 19 @ 20c. with the indications favoring a further appreciation.

CEVADILLA is scarce and held at \$1.25.

CORIANDER is offered sparingly at 5½ @ 6c. for bleached. Unbleached to arrive is held at 5½c.

FENNEL, New Crop, German, is finding sale at 10½c.

HEMP, Russian, remains quiet at 3¾c. spot.

## Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted one time free; for each additional insertion Fifty Cents. Write distinctly, on one side of paper only, and do not use postal cards.*

#### POSITIONS WANTED.

WANTED Position as sugar-coater by young man of good habits. For further particulars and samples of work. Address C. O. Ater, at this office.

GRADUATE of N. Y. C. P. registered in Connecticut and New Jersey, desires permanent position; good references. Address Box 37, West Morris, Conn.

POSITION WANTED by a graduate of N. Y. C. P., 25 years old; single; registered in N. Y., N. J. and Conn.; 10 years' practical experience; fully competent to manage. "Lithium," care this office.

SITUATION WANTED.—A graduate of P. C. P., aged 35, wants a position in the South, Florida preferred; has had 17 years' practical experience and is considered a first-class man; best references as to character, ability, etc. Address, stating terms, "W. L. H.," Box 75, Haddonfield, N. J.

POSITION WANTED by a licensed pharmacist in New York State; has had 6 years' experience and can give references. Address H. A. Smith, Binghamton, N. Y.

POSITION WANTED.—Drug clerk; assistant in Ohio; 4 years' experience; can do anything from porter to prescription clerk; will go anywhere; salary small. "Borate," this office.

POSITION WANTED by December 15 by a young man of 7 years' experience in pharmacy; registered by examination in Ohio and Pennsylvania; best of reference furnished. George S. Morron, Derry Station, Pa.

POSITION WANTED.—Junior clerk of 2 years' experience with his present employer wishes change of situation; eighteen years of age; best of references. Address "Drugs," P. O. Box 50, Jersey City, N. J.

LADY graduate, experienced, wishes position in drug store or dispensary, city or country; A+ reference. Address "Pharmacist," at this office.

POSITION WANTED.—By a young man having good practical experience; speaks Swede and English; 24 years; can furnish the best of references. Address Wm. Hornstrom, 737 Fifth street, Warren, Pa.

POSITION WANTED, city or country, by a licensed drug clerk; has had six years' experience; 25 years of age; sober and industrious; good reference. Address "Antifebrin," 82 Washington street, Binghamton, N. Y.

POSITION WANTED by a young man 22 years of age; 4 years' experience; with N. Y. C. P. Junior privileges; "must have a position;" moderate salary; can furnish best of references. Address "H<sub>2</sub>O<sub>2</sub>," at this office.

YOUNG MAN, single, two years' experience, desires a position in drug store; no bad habits; A+ references; salary not the main object; Wisconsin preferred. Address Fred Kendell, Rock Elm, Wis.

SITUATION WANTED as distributing advertising agent; have had six (6) years' experience in the retail drug business; best reference, including present employer. Address, giving salary, "Lunar Caustic," 544 North street, Rochester, N. Y.

DRUG CLERK wants situation; reference from last employer. Address "M. C. W.," this office.

WANTED.—Situation by young man in first-class pharmacy, by first of January; twenty-five years of age; seven years' practical experience; three years with present employer and four with former. Address T. M. Jacqueman, graduate Louisville College of Pharmacy, 468 East Oak street, New Albany, Ind.

SITUATION WANTED.—Thorough druggist, easy address and good habits, with 14 years' experience, will be glad to hear from California druggists. Box 46, Magnolia, Miss.

DRUGGIST'S RELIEF CLERK, evenings and Sundays. Chas. F. Antz, 417 West 30th street.

POSITION WANTED by a young man in retail drug store; 3½ years' experience; unlicensed; can furnish best references. Address John A. Fairly, Ellisville, Miss.

POSITION WANTED.—Position wanted as traveling salesman or any responsible position in drug house; have had experience in both; am a graduate of N. Y. C. P. Address "Responsible," at this office.

#### BUSINESS OPPORTUNITIES.

STORE TO LET.—First-class place for drug shop; 115 and 117 Wright street, near Broad street; rent \$20 per month. F. Beyer, 111 Wright street, Newark, N. J.

FOR SALE.—Net profits per year \$1,800; a live growing town; rent for store and house only \$14; come and stay a week, if not as represented will pay all expenses; price \$2,800; terms to suit. Address J. A. Van Valzah, Hughesville, Pa.

FOR SALE.—One of the best paying drug stores in Indiana, county seat; net profits, \$2,500 per year. Address "Profitable," this office.

DRUG STORE WANTED—I want to buy a drug store in good town. Address "Bromo," care AMERICAN DRUGGIST, 17 College place, New York City.

I WANT to purchase a drug store in good locality commanding a good prescription and general drug trade; invoice \$3,000 to \$6,000; can furnish cash and security. Address "Carlisle," at this office.

A good drug store, valued at \$4,500, is for sale in New Jersey for only \$3,000, if bought at once; sales average about \$23 daily. Address "Creta," at this office.

FOR SALE.—Stock, machinery and trademark for the manufacture of gelatine capsules. Address 1280 Third avenue, Brooklyn, N. Y.

TO RETIRE.—I offer fine fixtures, stock and trade worth \$2,500, for \$1,500, spot cash. Address "Doctor," 24 Colden street, Newburg, N. Y.

WANTED.—Complete volumes of the PHARMACEUTICAL RECORD for 1887, 1888, 1889, 1890, 1891 and 1892; either bound or unbound, preferably the former; state price and condition of volumes. F. J. Wulling, Minneapolis, Minn.

Clerks and Employers should call at this office, register their wants and examine our list of POSITIONS WANTED POSITIONS VACANT and BUSINESS OPPORTUNITIES, which can be consulted free of charge.

# ORIGINAL PACKAGE PRICES.

It should be understood that the prices quoted in this column are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a considerable range of prices.

## Drugs, Chemicals, &c.

|                            |       |       |
|----------------------------|-------|-------|
| Acetanilid, bulk, per lb.  | .35   | .36   |
| " lb., per lb.             | .58   | .58   |
| " oz., per oz.             | .06   | .06   |
| Acetate of lime:           |       |       |
| Brown, per 100 lb.         | .90   | .95   |
| Gray, per lb.              | .01   | .01   |
| Acids:                     |       |       |
| Acetic Com'l.              | .03   | .03   |
| Aqua Fortis, 36 deg.       | .03   | .03   |
| " 40                       | .03   | .04   |
| Benzoic, German            | .47   | .54   |
| " English                  | .09   | .09   |
| Boracic, Whole             | .13   | .14   |
| " Powdered                 | .13   | .14   |
| Citric, American           | .45   | .46   |
| " English                  | .45   | .46   |
| Carbolic Crystals          | .13   | .17   |
| bulk                       | .30   | .32   |
| lb. bottle                 | .81   | .85   |
| Muriatic, 18 deg.          | .03   | .03   |
| Nitric, 38 degrees         | .04   | .04   |
| " 40                       | .04   | .04   |
| Oxalic, English            | .06   | .06   |
| " German                   | .06   | .06   |
| Picric                     | .26   | .26   |
| Salicylic                  | 1.00  | 1.00  |
| Sulphuric                  | .70   | 1.00  |
| Tartaric, Crystals         | .23   | .23   |
| " Powdered                 | .23   | .24   |
| Tannic                     | 1.03  | 1.00  |
| Alcohol, Grain, per gal.   | .24   | .28   |
| (Less Rebate)              |       |       |
| Wood, 95/97                | 1.00  | 1.05  |
| Alcoholene                 | .30   | 1.30  |
| Alum, Lump, per 100 lb.    | .10   | 1.75  |
| Ground, per 100 lb.        | .10   | 1.80  |
| Antifebrine per oz.        | .19   | .20   |
| Antipyrine, per oz.        | 1.20  | 1.40  |
| Arrow root, Berm., lb.     | .24   | .25   |
| St. Vincent, in bbl., lb.  | .11   | .11   |
| Arsenic:                   |       |       |
| Red Saxon, lb.             | .05   | .06   |
| White                      | .03   | .03   |
| Balsam, Copaiba, lb.       | .33   | .35   |
| Fir, Canada, gal.          | 3.00  | 3.25  |
| Fir, Oregon, gal.          | .75   | .80   |
| Peru, lb.                  | 1.30  | 1.40  |
| Tolu, lb.                  | .23   | .25   |
| Bark, Buckthorn, per lb.   | .07   | .09   |
| Cascara Sagrada, lb.       | .06   | .07   |
| Elm, lb.                   | .10   | .11   |
| Orange peel                | .06   | .07   |
| Sassafras, per lb.         | .06   | .07   |
| Soap, lb.                  | .03   | .04   |
| Bicarb. Soda, Engl., lb.   | .03   | .03   |
| domestic, lb.              | .03   | .03   |
| Bichromate, Pot'h, lb.     | 1.00  | 1.10  |
| Bismuth, Sub. Nit.         | 1.95  | 2.00  |
| per lb., bulk              | 2.25  | 2.30  |
| Bismuth, Sub. Carb.        | .08   | .08   |
| per lb., bulk              | .08   | .08   |
| Bleach'g Powd., per lb.    | .08   | .08   |
| Blue Vitriol, lb.          | .03   | .03   |
| Borax, refined, lb.        | .07   | .08   |
| Concentrated, lb.          | .07   | .08   |
| Bromate, best ad, ton      | 19.00 | 19.50 |
| Bromide Potash, Dom.       | .35   | .36   |
| mestic, b'k, lb.           | .43   | .44   |
| bottles, lb.               | .43   | .44   |
| Bromide Ammonium           | .43   | .44   |
| bulk                       | .43   | .44   |
| Bromide Sodium, b'k.       | .40   | .41   |
| Bromine, bulk              | .43   | .45   |
| Burgundy pitch, per lb.    | .08   | .08   |
| Cacao Butter:              |       |       |
| 12-lb. boxes, lb.          | .34   | .34   |
| Dutch A., per lb.          | .33   | .34   |
| Caffeine                   | 1.90  | 2.25  |
| Camphor, ref'd, bbls., lb. | .45   | .46   |
| cases, lb.                 | .46   | .48   |
| Cantharides, Chinese, lb.  | .28   | .30   |
| Russian, lb.               | .70   | .75   |
| Carb. Ammonia              | .08   | .08   |
| cases, lb.                 | .18   | .19   |
| Cassia Buds, lb.           | .15   | .15   |
| Castor Oil, cases, lb.     | .15   | .15   |
| Barrel, lb.                | .14   | .15   |
| Cautic Soda, 70%, 100 lb.  | 2.70  | 2.80  |
| Cautic Soda, 60%, 100 lb.  | 2.90  | 3.10  |
| Chalk, Engl. Precip.       | .04   | .06   |
| bulk, lb.                  | .04   | .06   |
| Chloral Hydrate Cry.       | .95   | 1.05  |
| stals, bulk, per lb.       | .90   | 1.00  |
| Hydrate crusts, bulk,      | .90   | 1.00  |
| per lb.                    | .90   | 1.00  |
| Chlorate Pot. Cry., lb.    | .14   | .15   |
| Pow'd, lb.                 | .15   | .15   |
| Chloroform, Bulk, lb.      | .50   | .51   |
| Cinchonidine Sulphate      | .09   | .09   |
| of German, oz.             | .09   | .09   |
| Citrate U. S. P. Iron, lb. | .59   | .59   |
| Soluble                    | .59   | .59   |
| Iron and Ammonia, lb.      | .59   | .59   |
| Iron and quinine           | 1.50  | 1.55  |
| Iron and strychnine        | 2.00  | 2.05  |
| Phosphate U. S. P., lb.    | .57   | .57   |
| Pyrophos, U. S. P., lb.    | .57   | .57   |
| Pyrophos, Soluble, lb.     | .57   | .57   |
| Potash, per lb.            | .49   | .49   |
| Soda, per lb.              | .49   | .49   |
| Cobalt, pow'd, lb.         | .10   | .10   |
| Cocaine Murate, per oz.    | 4.95  | 5.30  |

|                           |       |       |
|---------------------------|-------|-------|
| Codine, bulk, oz.         | 4.15  | 4.15  |
| Codine, eight.            | 4.65  | 4.65  |
| Cod Liver Oil, Nor-       |       |       |
| wegian, bbls.             | 18.50 | 22.00 |
| Colocynth:                |       |       |
| Trieste, lb.              | .27   | .38   |
| Spanish                   | .20   | .24   |
| Copperas, per 100 lb.     | .80   | .90   |
| Cr. Tartar, Crystals, lb. | .18   | .19   |
| Powdered, lb.             | .19   | .20   |
| Cubeb Berries, XX, lb.    | .23   | .25   |
| Ordinary, lb.             | .18   | .25   |
| Cutch, bales, SM, lb.     | .04   | .05   |
| Cutch, boxes lb.          | .09   | .09   |
| Cuttle bone, Trieste, lb. | .11   | .12   |
| Jewellers' lb.            | .35   | .35   |
| Dextrine                  | .04   | .05   |
| Divi Divi, per ton        | 50.00 | 60.00 |
| Dragon's B'd, lump, lb.   | .10   | .10   |
| In reeds, lb.             | .45   | .50   |
| Epsom Salts, per 100 lb.  | 1.10  | 1.20  |
| Ergot:                    |       |       |
| G'm'n and Russ'n, lb.     | .26   | .27   |
| Spanish, lb.              | .32   | .35   |
| Ergotine, Domestic        | .32   | .40   |
| German                    | 4.00  | 4.00  |
| Flowers:                  |       |       |
| Arnica Flowers, per lb.   | .10   | .11   |
| Chamomile                 |       |       |
| German, New, lb.          | .17   | .24   |
| Roman, New                | .10   | .18   |
| Roman, lb., old           | .12   | .20   |
| Lavender Flowers          |       |       |
| Ordinary, per lb.         | .04   | .08   |
| Select, per lb.           | .15   | .65   |
| Gambier, lb.              | .03   | .04   |
| Glycerin, bbls, lb.       | .12   | .13   |
| cases, lb.                | .14   | .16   |
| Grains, Paradise, lb.     | .06   | .07   |
| Guarana, lb.              | .90   | .95   |
| Gums:                     |       |       |
| Aloes, Barb, lb.          | .06   | .12   |
| Cape, lb.                 | .05   | .06   |
| " Curacao, lb.            | .08   | .03   |
| " Socotrine, lb.          | .28   | .40   |
| Arabic 1st picked         | .47   | .55   |
| " and                     | .36   | .40   |
| Arabic, sorts             | .12   | .13   |
| Asafetida, lb.            | .12   | .15   |
| Benzoin, lb.              | .28   | .38   |
| Chicle, lb.               | .22   | .23   |
| Gamboge, lb.              | .58   | .54   |
| Guaiac, lb.               | .16   | .24   |
| Kino, lb.                 | .75   | 1.00  |
| Mastic, lb.               | .62   | .70   |
| Myrrh, lb.                | .80   | .38   |
| Oilbaum, sorts, lb.       | .05   | .06   |
| " tears, lb.              | .11   | .13   |
| Sandrac, lb.              | .29   | .30   |
| Senegal, picked, lb.      | .14   | .60   |
| sorts, lb.                | .09   | .10   |
| Shellac, DC, lb.          | .34   | .35   |
| VSO, lb.                  | .29   | .30   |
| " Diam'd, lb.             | .29   | .29   |
| " SS, lb.                 | .29   | .29   |
| " TN, lb.                 | .26   | .27   |
| " Garnet                  | .24   | .24   |
| Bleached, lb.             | .30   | .31   |
| Tragacanth, Aleppo, lb.   | .30   | .58   |
| Harlem Oil                | .45   | 1.05  |
| Indigo, lb.               | .10   | .20   |
| Insect Flowers            | .16   | .20   |
| Insect Powder, pure, lb.  | .10   | .20   |
| Iodide Potash, bulk, lb.  | 2.75  | 2.80  |
| " bot's, lb.              | 2.85  | 2.88  |
| Isinglass, Am'r'n, lb.    | .47   | .60   |
| Japan, lb.                | .35   | .35   |
| Juniper Berries, lb.      | .02   | .02   |
| Leaves:                   |       |       |
| Belladonna, per lb.       | .09   | .11   |
| Buchu, short, lb.         | .12   | .15   |
| " long, lb.               | .25   | .28   |
| Coca, prime, lb.          | .12   | .38   |
| Damiana, lb.              | .16   | .16   |
| Hyoscyamus                | .07   | .08   |
| Laborandi, lb.            | .45   | .50   |
| Senna Alex nat'l, lb.     | .18   | .25   |
| Senna Alex garbled lb.    | .22   | .27   |
| Senna Tinney, lb.         | .06   | .18   |
| Stramonium                | .05   | .08   |
| Licorice, P. & S, lb.     | .24   | .24   |
| Lupulin, German           | .45   | 1.75  |
| Lycopodium, lb.           | .58   | .60   |
| Manna, large flake, lb.   | .85   | .90   |
| Small flake, lb.          | .35   | .36   |
| Menthol, Japanese         | 4.00  | 4.10  |
| Mercurials:               |       |       |
| Blue Pill, lb.            | .38   | .34   |
| Calomel, lb.              | .71   | .71   |
| Cor. Sublimat, lb.        | .62   | .62   |
| Mercury and Chalk         | .28   | .30   |
| Ointment, lb.             | .81   | .86   |
| Red Precipitate, lb.      | .81   | .86   |
| White                     | .81   | .86   |
| Morphine, bulk, oz.       | 1.90  | 2.05  |
| Eight, oz.                | 2.25  | 2.30  |
| Moss, Irish, lb.          | .08   | .06   |
| Irish, bleached, lb.      | .13   | .15   |
| Muriate Potash, per 100   | 1.78  | 1.85  |
| lb.                       | .03   | .03   |
| Naphthaline, flake, per   | .03   | .03   |
| lb.                       | .03   | .03   |
| Naphthaline, Ball, per    | .03   | .03   |
| lb.                       | .03   | .03   |

|                            |      |      |
|----------------------------|------|------|
| Nitrate Silver, oz.        | .47  | .48  |
| Nitrate Soda, 100 lb.      | 1.85 | 1.95 |
| Nux Vomica, lb.            | .03  | .04  |
| Nutgalla, China, per lb.   | .13  | .13  |
| Aleppo, per lb.            | .14  | .14  |
| Oils, Essential:           |      |      |
| Anise                      | 1.40 | 1.45 |
| Almonds, Bitter            | 7.50 | 7.50 |
| " Sweet                    | .20  | .43  |
| Bay, per lb.               | 3.50 | 4.00 |
| Bergamot                   | 1.75 | 2.65 |
| Cajeput, Native            | .35  | .45  |
| Camphor                    | .07  | .08  |
| Cassa                      | .80  | .85  |
| Citronella, Native         | .24  | .28  |
| Clove                      | .52  | .55  |
| Copaiba                    | .65  | .70  |
| Croton                     | .75  | .80  |
| Cubeb                      | 2.00 | 2.10 |
| Erigeron, per lb.          | 1.45 | 1.50 |
| Geranium Chris.            | 4.50 | 7.50 |
| Lavender                   | 1.20 | 1.85 |
| " Garden                   | .40  | .90  |
| Lemon, as to brand         | .95  | 1.80 |
| Lemongrass                 | .70  | 1.10 |
| Musk, per lb.              | 7.00 | 8.00 |
| Myrbane                    | .17  | .19  |
| Neroli                     | .25  | .29  |
| Nutmeg                     | 1.75 | 2.75 |
| Orange                     | 1.40 | 1.65 |
| Origanum                   | .24  | .24  |
| Pennyroyal                 | 1.00 | 1.10 |
| Peppermint, bulk           | 2.20 | 2.40 |
| " HGH                      | 2.50 | 2.65 |
| Rose                       | 7.50 | 8.00 |
| Sandalwood                 | .34  | .37  |
| Sassafras                  | .28  | .30  |
| Sassafras, Artificial      | 1.60 | 1.90 |
| Spearmint                  | 2.00 | 3.00 |
| Tansy                      | 1.55 | 1.60 |
| Wintergreen                | .95  | 1.00 |
| " Artificial               | .95  | 1.00 |
| Wormwood                   | .25  | 3.75 |
| " HGH                      | .25  | 3.75 |
| Opium, Natur'l, ca, per    | 2.47 | 2.50 |
| lb.                        | 2.47 | 2.50 |
| Opium, Ordinary            | 2.50 | 2.55 |
| Jobbing, per lb.           | 2.50 | 2.55 |
| Opium, Powd., per lb.      | 3.25 | 3.30 |
| Phenacetine, per oz.       | .85  | 1.00 |
| Purified Potash, Yel-      | .28  | .33  |
| low, per lb.               | .30  | .48  |
| Red, per lb.               | .30  | .48  |
| Quicksilver, flasks, per   | .58  | .54  |
| Quinine:                   |      |      |
| Domestic, bulk, oz.        | .22  | .22  |
| Domestic, oz.              | .22  | .22  |
| German, bulk               | .19  | .19  |
| German, oz.                | .19  | .19  |
| Roots, Aconite, lb.        | .09  | .14  |
| Althea, cut, lb.           | .15  | .18  |
| Alkanet, lb.               | .06  | .07  |
| Arnica, lb.                | .12  | .13  |
| Beladonna Ger., lb.        | .08  | .12  |
| Blood, lb.                 | .05  | .06  |
| Calamus, lb.               | .07  | .08  |
| Calamus, bleac'd, lb.      | .11  | .14  |
| Colchicum, per lb.         | .21  | .24  |
| Colombo, lb.               | .06  | .11  |
| Daadelon, Germ. lb.        | .07  | .08  |
| Dogwood, lb.               | .08  | .10  |
| Galangal, lb.              | .04  | .04  |
| Gentian, lb.               | .03  | .04  |
| Ginseng, lb.               | 2.50 | 3.25 |
| Ginger, Jamaica,           | .16  | .17  |
| bled, lb.                  | .16  | .17  |
| Ginger, Jamaica,           | .15  | .17  |
| unbled, lb.                | .15  | .17  |
| Golden Seal, lb.           | .21  | .28  |
| Hellebore, powd., lb.      | .07  | .08  |
| Ipecac, lb.                | 1.15 | 1.20 |
| Jalap, lb.                 | .28  | .30  |
| Kava Kava, lb.             | .27  | .30  |
| Licorice, select, lb.      | .08  | .15  |
| " Pt w'd, lb.              | .05  | .12  |
| Lovage, lb.                | .50  | .55  |
| Mandrake, lb.              | .05  | .04  |
| Orris, Florentine, lb.     | .30  | .35  |
| Orris, Verona              | .10  | .14  |
| Pink, lb.                  | .24  | .30  |
| Rhubarb, whole, lb.        | .25  | .60  |
| Saraparilla, Hond. lb.     | .28  | .48  |
| Saraparilla, Mex. lb.      | .09  | .10  |
| Senega, lb.                | .45  | .47  |
| Serpentaria, lb.           | .80  | .82  |
| Valerian, Belgian, lb.     | .07  | .07  |
| " German, lb.              | .10  | .12  |
| Saffron, Amn., lb.         | .32  | .35  |
| Spanish, Valencia, lb.     | 6.50 | 7.00 |
| Spanish, Alicante, lb.     | 5.00 | 5.50 |
| Sai Ammoniac, lump, lb.    | .08  | .08  |
| Do. Granulated, lb.        | .05  | .08  |
| Sai Soda, Eng., 100 lb.    | 1.00 | 1.05 |
| " American                 | .90  | .95  |
| Salt peter, crude, per lb. | .93  | .94  |
| Salt peter, Refined, per   | .06  | .08  |
| lb.                        | .06  | .08  |
| Seeds:                     |      |      |
| Anise, Ital, lb.           | .10  | .11  |
| Anise, German, lb.         | .06  | .06  |
| Anise, Star, lb.           | .06  | .06  |
| Canary, Smyrna, lb.        | .02  | .02  |
| Canary, Sicily, lb.        | .02  | .02  |
| Caraway, lb.               | .03  | .07  |

|                         |       |       |
|-------------------------|-------|-------|
| Cardamon, Aleppy,       | .65   | .75   |
| per lb.                 | .65   | .75   |
| Calver, lb.             | .19   | .20   |
| Cardamon, Malabar,      | .75   | .85   |
| per lb.                 | .75   | .85   |
| Colchicum, lb.          | .12   | .14   |
| Coriander, lb.          | .05   | .05   |
| Cumin, lb.              | .11   | .11   |
| Fennel, Germ., lb.      | .11   | .12   |
| Flax Meal, per lb.      | .08   | .08   |
| Foenugreek, lb.         | .03   | .03   |
| Hemp, Russian, lb.      | .03   | .03   |
| Mustard, yel. Cal. lb.  | .04   | .05   |
| Mustard, brown, Cal.    | .03   | .04   |
| Poppy, per lb.          | .09   | .10   |
| Quince, German, lb.     | .45   | .50   |
| Rape, German, lb.       | .03   | .03   |
| Rape, English, lb.      | .05   | .06   |
| Soap, Castile, Mara,    | .06   | .06   |
| mottled, pure, lb.      | .20   | .20   |
| White, lb.              | .20   | .20   |
| Soda Ash, lb., 48% per  | 1.50  | 1.80  |
| 100 lb.                 | .04   | .06   |
| Squills, white, lb.     | .11   | .14   |
| Sugar Milk, powd., lb.  | .11   | .14   |
| Sugar Lead, white, lb.  | .11   | .11   |
| " Lead, brown, lb.      | .05   | .06   |
| Sulphate Ammonia, per   | 2.90  | 3.00  |
| 100 lb.                 | 1.11  | 1.15  |
| Do. Potash, 48% per     | 2.20  | 2.25  |
| lb.                     | 2.20  | 2.25  |
| Do. Potash, 90% per     | 2.20  | 2.25  |
| lb.                     | 2.20  | 2.25  |
| Sulphur, Roll           | .05   | .05   |
| " Flour                 | .05   | .05   |
| Spirits Nitre, U. S. P. | .39   | .40   |
| Spirit Ammonia, Arom.   | .44   | .45   |
| Sulphuric Ether         | .54   | .61   |
| Sumac, Sicily, ton      | 75.50 | 77.00 |
| " Virginia              | 43.00 | 47.50 |
| Tar Barbadoes, gal.     | .15   | .15   |
| Tin Crystals, bbls, per | .15   | .15   |
| lb.                     | .15   | .15   |
| Tonka Beans, Angost.    | 1.70  | 1.85  |
| lb.                     | 1.70  | 1.85  |
| Tonka Beans, Para, lb.  | 1.50  | 1.60  |
| " Angostura             | 1.70  | 1.85  |
| Turpentine, Spirits     | .80   | .80   |
| Vanilla Beans, lb.      | 6.00  | 13.00 |
| " cut, lb.              | 4.75  | 6.00  |
| Venice Turpentine, bar- | .18   | .19   |
| rels, lb.               | .18   | .19   |
| Cans, lb.               | .18   | .19   |
| Wax, Brazil, Veg. lb.   | .11   | .19   |
| Japan, lb.              | .08   | .11   |
| Zinc Oxide              | .30   | .48   |

# American Druggist and Pharmaceutical Record.

A JOURNAL OF PRACTICAL PHARMACY.

VOL. XXIII. No. 20.

NEW YORK, NOVEMBER 16, 1893.

WHOLE No. 273.

## AMERICAN DRUGGIST PUBLISHING COMPANY.

37 COLLEGE PLACE, NEW YORK.

A. R. ELLIOTT, PRESIDENT.

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The "American Druggist and Pharmaceutical Record" is issued on Thursday of each week. Changes of advertisements and all copy for publication should be received before Tuesday of each week.

We are not responsible for any money paid to agents. All remittances should be made direct to this office. Express Orders, Post-Office Orders and Drafts on New York should be made payable to the "American Druggist Publishing Company" and addressed to them at 37 College Place, New York.

Liberal Commissions to Club Agents.

The "special cable" dispatches of some daily newspapers are indeed wonderful. Here is the New York *World*, for example, going to the expense of "cabling" over two columns of matter relating to the illness of Dr. CORNELIUS HERZ, of Panama Canal notoriety. The wonderful part of the performance consists in the fact that the matter cabled appeared about a month ago as a leading article in the *British Medical Journal* and reached us in due course of the mails some two weeks since. The charitable supposition is that the editor of the *World* has been imposed upon, though some uncharitable readers will, doubtless, think themselves the sufferers by the imposition and the editor a *particeps criminis*.

UNEARNED increment, the *blêc noir* of the single tax party, exists in commerce as well as in land values. A pharmacy in this city sells each year several thousand bottles of a rheumatism remedy which is known only by the number which it bears on the prescription file. Not a cent has been spent in advertising the remedy. The prescriber is long since dead and even forgotten, but the original patient sounded the praises of the remedy to his friends, and they to their friends. Its virtues reached the ears of old DAN RICE, the circus clown and manager, and after trying it he enthusiastically noised abroad its virtues throughout the length and breadth of his travels. The firm were offered \$5,000 dollars for the recipe and the privilege of putting it up, which they declined.

## FAULTY PRESCRIPTION-WRITING.

THE *Medical Record* in a recent issue criticised the carelessness of other medical journals in regard to prescriptions, at the same time disclaiming any disposition to assume for the editor of the *Record* superiority in proofreading. The article has elicited a rejoinder from the editor of the *Medical News*, of Philadelphia, who points out in the most gentle and courteous manner that the disclaimer is as timely as the reproof, and brings forward the prescription printed below, which appeared in the September 2 issue of the *Record*, as an example of how a prescription should not be written:

|                         |                  |
|-------------------------|------------------|
| R. Tr. ferri chlor..... | 3 ss             |
| Spts. minderus.....     | 3 jss            |
| Glycerine.....          | 3 j              |
| Tr. aconitia.....       | 3 ss             |
| Aq. font.....           | q. s. ad. 3 viij |

What will strike most pharmacists as being perhaps the most conspicuous slip in this prescription is the use of the signs of solid measure where fluid measure was evidently intended. The synonym of solution of ammonium acetate is derived from the name of the physician who introduced it to the profession and should, of course, be capitalized and spelt *Mindereri*, this being the genitive of *Mindererus*. Glycerin is an English word and should have been Latinized to *glycerini*. And lastly we find the tincture of an alkaloid prescribed a palpable absurdity, heightened by the use of the nominative for the genitive case.

THE enterprising advertising agent occasionally finds it necessary to resort to rather "low down" tricks to prejudice advertisers against rival papers. We learn of one instance where the agent of a pharmaceutical paper, who had received from a possible advertiser the unwelcome information that the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD was more purely a druggist's paper than any other in the field, turned to the comprehensive article on "Insects Injurious to Drugs" by Professor SAYRE of the Kansas School of Pharmacy, and instanced it as a paper on Cockroaches and something entirely foreign to pharmacy. Misrepresentations of this kind are only injurious to their authors, and will hardly affect either the paper aimed at or the authority in pharmacy who may have contributed the article.

(Written for the American Druggist and Pharmaceutical Record.)

**THE OPPORTUNITIES OF THE CLERK.**

BY "KRABB."

Are there no possibilities for the numberless young men who choose pharmacy as a pursuit and become druggists' clerks? Must they necessarily revolve as a wheel on its axis, in an alternating service, from store to store, from one location to another, in a wearisome monotony of changeless duties? Many of the types which we meet in the trade impress us with the conviction that after the novitiate is passed, and it may be a diploma gained, ambition takes on a long respite from an active disposition, and a resolution to forge still farther ahead in the pursuit of extended knowledge and enlarged usefulness.

Yet he who fails to perceive in the pursuit of his chosen occupation something to be attained yet higher and more commensurate than that of the manual performance which his duties impose has failed to fully and clearly discern, and if he elects to continue a manual laborer, instead of qualifying as a scientist, and an expert in some branch of his amplified profession, he will forever rotate, as we have before stated, within the confines of a narrow circle and lapse into a mere machine—an automaton imitator. It would seem, then, to be clearly the instructor's duty to impress upon the minds of students of pharmacy the unusual opportunities which their occupation presents to an active mind—and the values of the time which can be utilized in study. Take, in order to demonstrate this, a hasty view of the character of the occupation of the retail assistant. It is not, certainly, in the average store that the demands of daily business require the unremitting application of two persons, and after whatever of preparation that may be necessary for the demands of immediate business is made there come in numerous waits, or as commonly used resting-spells, between the visits of customers. It is the utility of this spare time, in the ordinary quietude of the shop in the pursuit of information and of knowledge which will eminently fit the man for his place that the unusual opportunities of the pharmacist present.

If a studiously inclined youth, or one who desires to become so, will look into the histories of men, of our own as well as of former time, who have risen to eminence and positions of power through indomitable determination and selfwill, overthrowing all obstacles—even ploughing, as it were, through an almost hopeless slough of adverse circumstances, merely by applying time and opportunity to studiousness and industry, he should be infused with an ambitious desire to emulate those whose bright records adorn the roll of science, fame, and honor. In the paths of pharmaceutical pursuit, among the most worthy exemplars, stands foremost, perhaps, the person and history of Scheele, the Swedish chemist and apothecary—a truly remarkable man! If we deem genius to be derived only by transmission from parent to offspring, then Scheele was *not* born a genius. Education did not make him what he became; but reason, observation and study did. His parentage was obscure, humble, and poor. His father was a petty tradesman, with that apparently inevitable concomitant of poverty, a large progeny of children. Scheele's schooling was very limited, and at the early age of 14 he was placed as an apprentice with an apothecary of his town.

From what can be gleaned from a rather meager history, he was no sooner installed into his new occupation than curiosity seized his mind. Insatiable desire followed, for he realized (as but few now seem to realize in like situations) that he had been purposely placed in an extensive museum of natural products

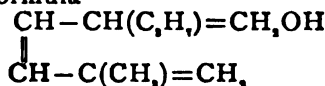
and curiosities. To search the character of these, to understand their nature, their origin and their properties, became at once an absorbing study. After this no moments were wasted—there was no dreary monotony of weary hours, even in the confines of that little shop. Every spare moment from his duties was devoted to some investigation and research. Considering the extensive range of Scheele's discoveries, the results of his multitudinous investigations, and the fact that he died at a comparatively early age, it is difficult to conceive how one mind, even unceasingly active, could accomplish so much. This man overcame the obstacles which confronted him by patient and persevering industry and determination. He had but few books. His apparatus, much of which he devised and improvised, was of the most rude construction. He was shut out from contemporaneous information by inability to interpret any other than his own language. Scheele's name must ever be honored by pharmacists throughout the world for all time to come. He was an apothecary's apprentice! Contrast the opportunities he had with those at command to-day. His means were almost wholly of his own creation; yet note what brilliant results! What he accomplished for science and the world at large! Unless we are prepared to concede that science in all her varied departments has reached the limitations of knowledge, there should be other apothecaries' apprentices in other laboratories and workshops to-day, preparing to shed more luster upon the profession and upon the achievements of the past, and to add more names of honor to the roster of scientific fame.

**Soap Bubble Solution.**—According to a communication recently made to the Academy of Sciences, the following solution affords very thin and permanent bubbles:

|                          |            |
|--------------------------|------------|
| Yellow resin.....        | 10 grammes |
| Carbonate of potash..... | 10 "       |
| Water.....               | 100 c. c.  |

Boil until completely dissolved, and before use dilute the solution with four times its volume of water. It is somewhat difficult to float soap bubbles upon carbon dioxide, because if you managed, after a score of trials, to free your bubble from the pipe on which you blew it, the bubble usually bursts the moment it touches your heavy gas. You must remove every trace of hydrochloric acid, which is carried over with the gas, by washing, the presence of this acid being fatal to the life of a soap bubble.

**Rhodinol**  $C_{10}H_{18}$ , a constituent of the fluid part of rose oil, is, according to Eckart (*Apoth. Zeit.*, 1893, p. 494), a primary alcohol with two ethylene bonds, and under the influence of oxidizing substances yields valerianic acid. It is an isomer of linalool and of geraniol, and has the formula



According to Barbier (*Compt. Rend.*, 1893, p. 177) rhodinol is an oily liquid boiling without decomposition at  $126.5^\circ$  under a pressure of 16 millimeters. It has a specific gravity of 0.8956 and a rotatory power of  $[\alpha]_D = -2.37''$  at  $25^\circ$  C. When treated with hydrochloric acid it yields dipentenedichlorhydrate. Rhodinal when heated with anhydrous acetic acid to  $180^\circ$  C. in a closed receptacle yields only rhodinal acetate, a colorless mobile liquid of an agreeable odor with a specific gravity of 0.9214 and a boiling point of  $131^\circ$ .

# News and Notes.

## Gotham Gossip.

The pharmacy of C. F. Hanson at 81 Catharine street has been sold to F. W. Schutzlein & Co.

The genial and popular Lewie L. Pope, representing Lawrence, Williams & Co., Cleveland, Ohio, visited this city last week.

Francis B. Hays, the affable secretary of the New York Apothecaries' Society, has returned after a glimpse of the World's Fair and the Windy City.

Henry Woodward, of Middletown, Conn., and Mr. Munson, representing the Apothecaries Hall Co., of Waterbury Conn., were noticed among the trade recently.

The N. Y. C. P. has fairly settled down to the Winters' work. The junior class has been increased since the opening of the session by the addition of several new members who have been successful in passing the preliminary examination.

Clerk Griffin has worn a very satisfied look during the past few days. Some of his friends are disposed to attribute this to the result of the recent elections, and Mr. Griffin himself does not deny that the results of the recent elections are to his liking.

It used to be plain George J. Seabury, but the *Farmaceutisk Tidskrift*, of Stockholm, has made him a Colonel, and what are we to do about it? "Col. Geo. Seabury" is how the genial head of the progressive firm of Seabury & Johnson is referred to in a recent issue of the paper mentioned.

Work is progressing briskly on the new college. The fact that the buildings are not yet ready for occupancy and may not be fully completed and ready until February is not due to any fault of the former building committee, who expedited matters as well as lay in their power, but is simply the result of a series of the usually unlooked-for but natural delays incident to the construction of a large building.

The fitting out of the American merchantman *El Cid* as a Brazilian war vessel has not been without interest for New York druggists. The contract for medical supplies, for one thing, is pretty eagerly sought after, and speculation as to who would be awarded the contract has been rife. Curiosity on this point has been settled by the announcement that McKesson & Robbins, who do a large business in South America, have been given a large order, which includes, among the drugs usually laid in by a ship surgeon preparatory to an extended cruise, large quantities of anesthetics, styptics and surgical instruments. An apothecary has not yet been appointed, but whoever secures the position will have to look forward to an exciting time, should the vessel ever succeed in making its way to Brazilian waters.

The president of the Alumni Association does not appear to be receiving much support or sympathy from the members in his efforts to found an "Alumni Gazette." No meeting was held on Wednesday evening last, because of the lack of a quorum. Some of the members are known to be dissatisfied with Mr. Graeser's choice for editor of the projected periodical, and he is already meeting with some opposition in

his efforts to foist an outsider on the association. It is argued that the editor of a pharmaceutical periodical should be a pharmacist; and in the case of an alumni paper it is particularly necessary that the editor should be an alumnus of the college. There are any number of members competent to fill the editorial chair, if they would but overcome their modesty. If ex-President Alfred Stover could spare the time or be induced to accept it, he would discharge the duties with ability and credit.

It is necessary to exercise some degree of care in opening the ordinary ounce bromine bottle; but if the bottle containing the bromine be immersed in the proper amount of water necessary to make a solution of a given strength contained in a deep mortar and is then smartly tapped with a pestle no danger need be apprehended from the escape of fumes. The writer observed recently a peculiarly absurd performance on the part of a clerk in one of Hegeman's pharmacies. He conducted the operation of breaking a glass bottle containing bromine in the open street and employed a wedgewood mortar and an iron pestle. At every blow made with the latter instrument (which by the way should not be used for this purpose owing to the readiness with which iron is acted upon by bromine) he would retreat a few steps and return after an interval with evident signs of trepidation. He finally succeeded in breaking the bottle, and when satisfied of this retreated hastily to a distance of about 5 yards, eyeing the mortar and its contents as if he fully expected further developments.

I find in the course of my rambles about town that New York druggists are anything but pleased with the classification adopted by the *New York Herald* in the matter of "Situations Wanted" and "Help Wanted." What the *Herald* editor's idea of a professional person is can be best understood by reference to the advertising columns of the paper. One department is headed "Professional Situations," and as a druggist remarked to me the other day, "one would naturally expect to find there inquiries from or for architects, dentists, druggists, lawyers, physicians or other professionals, but instead, what do you find?—bookkeepers, companions, dressmakers, embroiderers, saleswomen, typewriters and persons advertising for 'positions of any kind!'" But the ways of the average newspaper editor are occasionally difficult of comprehension; and it may not be that the classification which places druggists in the same column with barkeepers and butchers is a true reflex of public opinion as to the status of the pharmaceutical profession.

Caswell, Massey & Co., a firm of New York pharmacists, which has been established in this city since the year 1780, occupies the old stand at 25th street and Broadway. Since the removal of Hazard, Hazard & Co. from the Fifth Avenue Hotel to premises further uptown, Caswell, Massey & Co. appear to catch a larger share of "passing trade," and at present are driving a brisker business than they have enjoyed for some time previously.

Caswell, Massey & Co. are particularly happy in their choice of goods for window display. At present they are showing nothing but perfumery and perfumed

sachet and face powders, and appear to have adopted an idea of a recent contributor to our series of "Tips on Advertising." This is evident in a "Violet Window," in which is displayed a number of the "Violet" specialties of the Crown Perfumery Company, including "Violettes de Parma" perfumed powder and soap.

Local correspondents are wanted for this paper. For particulars, address the Editor.

"Abbey's Theater Pharmacy" is the name by which Allen & Jones' new pharmacy at the corner of Broadway and 38th street, this city, will be known. The new premises occupy the entire corner of the building and embody many new features in drug store arrangement. The prescription counter, for example, is not situated where prescription counters usually are, in the rear end of the store, for this pharmacy has no rear; so prescriptions will be compounded in the cellar or basement by clerks whose duties will consist of prescription work alone.

The prescription department is in charge of J. M. Tobin who is also general manager. Mr. Tobin, was at one time proprietor of a Fifth avenue pharmacy, and is familiar with the better class trade, which will undoubtedly patronize the new store.

In designing the fixtures of the new premises, old rules have been discarded, the shop furniture being modeled after entirely new designs, by a firm which has not heretofore made a specialty of drug stores.

The soda fountain of the new establishment is an artistic adornment of the highest order and is a handsome example of Low Art Tile work, which we are given to understand was specially constructed for the premises in which it is contained.

It is not generally known that the Dr. Walter May Rew, who was recently tried and convicted on a charge of having issued bogus medical diplomas, was at one time an apothecary in the Department of Public Charities and Corrections under Dr. Charles Rice, who is chief of the General Drug Department. Such is the case, however. He held the post of apothecary at the Asylum for the Insane on Ward's Island and did considerable literary work during the period of his connection with the Department.

He contributed a number of papers to the *Druggists' Circular* at different times within the past five years, and his articles on "First Aid to the Sick and Injured" are familiar to many of the old subscribers to the *Pharmaceutical Record*.

After severing his connection with the Asylum for the Insane, which he left suddenly, but not without warning, one Easter morning, he opened a "Preparatory Medical School" at Poughkeepsie and published the skeleton of a quiz-book on anatomy.

He later transferred his operations to New York city, and at the time that he attracted the attention of the *New York Herald* was engaged in the manufacture and sale of bogus diplomas.

Of his early life but little is known save that he was a graduate of the University of Oxford, England, and his writings, particularly those of his earlier years before he became a slave to opium, showed much literary ability.

In passing sentence, Recorder Smythe, before whom he was brought, delivered himself as follows:

"In my judgment a more dangerous or more despicable crime could not be committed, especially by a man of the character of this prisoner, a man undoubtedly of education, who ought to be a man of refinement, and whose medical education ought to have taught him, as it does teach, that he is to act in a humane manner and not in such a way as to endanger either the lives or the comfort of his fellow beings. When such a man as he commits a crime of this character he is, in my judgment, worse than one who has not had the advantages which the defendant enjoyed.

However, he is an old man, who at some time of his life, probably the greater part of it, has been engaged in an honorable occupation. He has been intrusted, as I understand it, by reputable members of his profession to help them with their work. Something must have happened, probably his poverty of his bad habit—his indulgence in opium—to have brought him to the disgraceful position in which he is placed to-day. I am not inclined to deal harshly with him, but an example must be made of him for the purpose of deterring other persons engaged in like business.

#### New York State News.

G. Atwood Langford has removed from Mecklinburg to Watkins.

C. F. Hanson, Sixth avenue, New York, has purchased the store of the East New York Drug Co., Atlantic and New Jersey avenues, Brooklyn, N. Y.

The drug store and dwelling house on Prospect avenue, at Tomkin's Cove, the property of Dr. John Sengstacken & Bro., is now ready for the occupants.

C. A. Jones, formerly in business at Mt. Crawville, has purchased the pharmacy recently owned by Willis Thompson at Canastota and has moved to the latter town.

The Brooklyn College of Pharmacy has had an acquisition to her teaching staff in the appointment of A. P. Lehmann, Ph.D., of 1071 Bedford avenue, as Professor of Pharmacy and Director of the Pharmaceutical Laboratory.

George B. Wray's branch drug store, on Riverdale avenue, Yonkers, has removed from the corner of Hertiot street to the store next north on Riverdale avenue, which has been fitted up with all the appointments of a first-class pharmacy.

It is reported that the drug firm of Ballard & Hurlburt, at 243 East Main street, Rochester, has gone to the wall. Judgments aggregating \$13,784.34 were confessed and docketed with the county clerk. The sheriff took possession of the store but did not close it.

D. J. Pierce, formerly of Brooklyn and for the last year a traveler for Grosvenor & Richards, is now managing the Angemier pharmacy which has been removed from its old stand in Tompkinsville, S. I., to 188 New Jersey avenue, New Brighton, and seems to be making it a success.

On the afternoon of November 6, Deputy Sheriff Bennett sold the stock in the wholesale and retail drug stores of Potter & King, of Syracuse, who failed recently. C. W. Snow & Company and Charles Hubbard, Son & Company bid in the stock and will place it in their wholesale stores. The amount realized from the sale was about \$25,000.

#### Philadelphia Letter.

(From a staff correspondent.)

One notable change here, in conditions of trade, and which must have considerable significance, is a gradual diminution of the number of drug, jobbing, or wholesale

houses. A tendency toward a concentration of capital is destined, in all probability, to place what volume of this trade exists in the hands of very few houses. Merchandising in drugs was once a profitable business. Commercial enterprise, at that time, had not taken up a traffic in drugs, as in other natural products, and commodities, but now, articles known as such, constitute but a small proportion of the bulk or volume sold by the various jobbers, and the handling of drugs, merely and solely, has become almost profitless. A number of causes have contributed to this. Where, formerly, crude substances were used almost exclusively; concentrated and manufactured forms now hold sway; then there was the innovation of patent medicines which, at first, came gradually, but within the last five decades have made rapid strides into existence. Before values became so disturbed and unsettled, these articles formed an attractive auxiliary to each branch of the trade. The jobber embraced them most cordially; the retailer became an active and eager agent in effecting their sale. To each was granted a most generous margin of profit; the stock came, ready made, to hand; involved no labor, no risk, no responsibility. It was an easy-going business surely, but it has proven a most unfortunate "ignis fatuus" during only to disaster. No issue has ever arisen, in the annals of this trade, involving the relations and interests of the various factors, which has created such wide spread dissatisfaction and mistrust as the entrance into the arena of competition of the "cutter." He chose the fatter of the flock as his prey, and fixed his eyes on the patent medicine element. He ruthlessly turned on the light, and the public quickly caught glimpse of the pecuniary feast which the lions were sharing. The manufacturer had said to the consumer (and the arbitrary demand invited its own overthrow) "you shall pay a dollar for my article no matter how insignificant may be the cost, and you shall accept my unsustained guaranty of its efficacy and its value." The overthrow has come. The patents or proprietaries of the future will have to bear a far more equitable proportion between the cost of production and the cost to the consumer. If an attempt were made to establish an intrinsic value, it would be fatal to many of these articles, for they have no value at all!

To diverge to the consideration of other topics, your correspondent has been musing upon some of the older traditions, and now almost obsolete ideas in relation to the location of retail drug stores. No other place, except the angles of street intersections or corners, would in former time be acceptable, and every building enterprise involving a block of dwellings would have an inevitable reservation at one extremity or the other for the drug store. That illumined bottle must reach with its resplendent light two divergent directions, or the enterprise could not be expected to flourish, but if it were not for this advantage no other inducement would avail. But now it is quite possible to find successful pharmacies sandwiched in the middle of blocks of stores and dwellings, and really when once the place of their location becomes known to patrons, any particular location would seem of little moment. As a question of adaptability, however, the deep store, with but one frontage and two available walls of equal

and unbroken area, gives the best effect when fitted and furnished. But the latest innovation in Philadelphia is a basement drug store. This involves a descent from the graded walk, and a climbing up again, and cannot, of course, equal the convenience of the ground floor. Comfort and convenience are the subject of much thought and study in adapting public places to public uses. A thirsty mortal, on a piping hot day, would, perhaps, gladly seek the cooler depths of a basement, there to quaff his effervescing draft, while, on the other hand, the already jaded shopper, might, in all likelihood essay onward to find the next drug store above ground, and easier of access. This is, of course, assuming a probability—the facts might reverse this.

Among that portion of the trade, particularly of the dispensing branch, who are disposed to reflect at times upon the conditions which govern, the subject of more just legal discriminations will be a theme for future solution. There is a restless discontent manifest which protests against the exactions put upon the trade, and proclaims at the same time against the loose latitude accorded to irresponsible persons to trench and pirate upon the legitimate spheres of pharmacy. Where law compels an obedient respect to its mandates, it should also afford and secure to its subjects a just protection. The druggists, through the machinery of their respective organizations, particularly those of the States, can, if they will, shape proper legislation. A business made so gravely responsible to the law should be generously protected by the law.

#### Pennsylvania Pointers.

Dr. Feathers is putting some substantial improvements upon his office and drug store at Sandy Lake.

Ellis Kirk, of Renova, will remove his printing material from Fifth to Sixth street near the building where he is now located as a druggist.

The wood alcohol industry, the principal one in northwestern Wayne county, which has been idle since July, has resumed operations and will gradually increase to full forces.

The Potter Drug and Chemical Corporation, of Boston, Massachusetts, has filed a bill in equity in the United States Circuit Court, Philadelphia, against Charles E. Miller, Christian Shaub, Robert McGaw and Bates McGaw, of Lancaster, doing business as the Curative Skin Soap Company, charging alleged infringement on the plaintiff's patent. It is alleged that the defendants are putting up soap in wrappers with the printing "Curative Skin Soap," which, it is alleged, encroaches on the complainant's rights.

Local correspondents are wanted for this paper. For particulars, address the Editor.

A Texas editor has been going into economics. He says: "A bushel of corn makes four gallons of whisky, which retails at 16 dols. Of this the farmer gets 40 cents; the railroad, 1 dol.; the United States, 3 dols.; the manufacturer, 4 dols.; the vendor, 7 dols.; and the drinker—60 days and the *delirium tremens*."

**Boston Budget.**

Daniel J. Kiley, formerly with T. C. Barden, is the new proprietor of the "Oxford Pharmacy," Broadway, South Boston.

F. H. Dudley, a registered pharmacist of several years' experience with leading Boston druggists, has bought the Hancock Square Pharmacy at Charlestown.

"Hot Soda" is to be an important feature in many drug stores this Winter, if the elaborate preparations which are being made to supply this beverage is any criterion.

Jaynes & Co., the Washington street "cutters," attracted a large crowd to their store election night by furnishing the latest returns. Just now a revolving Ferris Wheel in miniature fills one of the windows of this firm.

The two new drug stores on the Back Bay, that of William W. Bartlet, Ph.G., on West Chester Park, and of Frank O. Guild, corner of Boylston and Exeter streets, are the subject of favorable comment with druggists who have inspected them.

A prominent Boston wholesaler is authority for the opinion that the first of the coming January will witness a harvest of failures in New England drug trade, which in point of members will be unparalleled. In this section there are establishments which are being "carried" by the wholesalers, and undoubtedly these will be the first to succumb, and the long continued financial depression will in all probability hasten the dreaded day of reckoning.

The T. Metcalf Co. is one of the Boston firms believing in specializing, and their success is an illustration (if one is needed) of what may be accomplished by conducting the drug business upon this principle. In window displays, this firm makes a feature of one line of goods at a time, and in their advertising the same method is adopted. One of their windows has recently been devoted to cologne water, three kinds being shown, which, in addition to being attractively arranged, had been happily named after three of our daily papers.

The advanced students at the Massachusetts College of Pharmacy are engaged upon some novel and interesting work; it is the manufacture of all the official preparations of the new U. S. P. The work is being performed under direction of the faculty, and upon the suggestion of the college authorities. The object of this movement is to provide something new and educational in the way of an exhibit, which is to be made at the meeting of the Massachusetts Medical Society to be held next year. The display will contain all of the official drugs and preparations, making an attractive exhibit, which when returned to the college, will be a valuable addition to its cabinet collection.

**Massachusetts Mention.**

Fall River has a new store. Wm. M. Dedrick is the proprietor.

B. Z. Winslow, drugs, Campello, is in insolvency. Liabilities, \$3,000; assets, \$700.

Beauregard & Provost and Smith & Beauregard, druggists, Haverhill, are reported assigned.

John H. Gilmore, formerly with Perham,

of Lexington, is taking a well earned vacation in New Hampshire.

Joseph Bergman opened his new drug store on Mechanic street, Clinton, on Saturday evening, November 4.

The liquor spies have been shaking up matters for the saloon keepers of Worcester—those who masquerade as druggists.

Frederick P. Brooks, Ph.G., M. C. P., '92, has bought F. E. Lovell's store at Woburn. Since his graduation Mr. Brooks has been head clerk for Kelley & Durkee, Boston.

The board of pharmacy have brought action against F. S. Rock of Marlboro for keeping a drug store without a licensed clerk. The defense was that, his business not warranting the keeping of a licensed clerk, he had instructed his clerk not to sell any of the drugs and was going to dispose of them in bulk at the earliest possible moment. Decision was reserved.

As a result of the election on Tuesday, Nov. 7, Essex County will be represented in the Senate by two members of the drug trade. The druggists who have secured this honor are Edward G. Frothingham, of Haverhill, and Eugene A. Bessom, of Lynn. The statement in our last issue that Mr. Bessom had been re-nominated for the legislature was an error, his constituents having selected him to represent them in the higher branch of the general court. Mr. Bessom was accorded the magnificent vote of 4,135, his nearest competitor having only 2,394 votes. Messrs. Frothingham and Bessom have had much experience in state house affairs, and they will prove excellent representatives of the profession to which they belong.

Hiram Winthrop Brooks, 23 years old, has been arrested at his boarding place at 173 Main street, Worcester, for robbing the safe at Bush & Co.'s drug store at 56 Front street. Brooks went to Worcester from Cambridge several years ago and entered the employ of Bush & Co. as clerk. A few weeks since young Brooks was discharged, and since then has had no work. Monday evening, November 6, he was in the rear office at Bush's chatting pleasantly with his former associates in the store, when he suddenly disappeared. It is claimed that he secreted himself in the cellar, and after the store was closed, which was shortly after midnight, went up stairs and proceeded to unlock the safe. The combination being the same as when Brooks worked in the store, the opening of the safe was an easy matter, and he soon secured the contents and made good his escape through a rear door which had a spring lock. When the store was opened next morning the discovery was made that the safe had been robbed. Suspicion immediately rested on young Brooks. When the accusation was first made, Brooks indignantly denied any knowledge of the affair, but weakened after a time, and made a clean breast of it. The hiding place of the money was then revealed, which was in some soiled linen ready for the laundry. The amount of money stolen was \$195 and a check for \$6.24.

**Maine Mention.**

Smith & Grow are proprietors of Portland's new store.

J. R. Hodgkins, of Lewiston, is drawing soda from a new fountain which he

recently purchased from the Low Art Tile Co.

The Deering Drug Co. has a handsome fountain of Tufts' manufacture. Frank L. Winship, formerly with Guppy & Hay, of Portland, is manager of this store.

Edgar H. Emery, formerly of New-hegan, and James J. Ward have recently formed a copartnership under the firm name of Emery & Ward to carry on the drug business in the store formerly occupied by W. A. Erskine. Both of the new proprietors are registered druggists, and they are very popular with Gardiner people generally.

**Western Winnings.**

O. P. Young, a druggist of 18 years' experience, has bought out the store of W. E. Myers, at Carlisle, Ia.

Dr. Goudy's Medicine Company, of Charleston, has been incorporated at Springfield, Ill., with a capital stock of \$6,000; incorporators, T. C. Miles, I. J. Miles, L. R. Schmalhausen and W. V. Miles.

The Wagner Pharmacy Company, of Third avenue, West Cedar Rapids, Ia., has sold out to E. L. Brown, of Onslow; the firm name will be E. L. Brown & Co. The Wagner Pharmacy Company will engage in business on the east side of the river.

Articles of incorporation of the California Medicine Company have been filed at San Francisco. This company will manufacture and sell medicines. The capital stock is \$1,000, all of which was subscribed by the following persons: J. F., J. A., E. F., Hannah and Mary T. Gibbon.

R. A. Brackett, of St. Paul, will look after the business of the Davis Drug Company, which will be located in the Syndicate block, corner of Broadway and First avenue, North Fargo, N. D. Mr. Brackett is a thoroughgoing young business man, and an experienced pharmacist.

Messrs. Read and Lightfoot, both capable druggists, have fitted up handsome quarters in the Turner and Moore block on West Second street, Little Rock, Ark., as the home of their new drug store. Mr. Read was formerly with Bradfield & Dowdy, and Mr. Lightfoot is a newcomer from Texarkana, where, until recently, he was engaged in similar business.

The Lambert Pharmacal Co. of St. Louis, Mo., has filed suit in the U. S. Circuit Court against Emil Heun, a druggist at Elmwood Place, Cincinnati, Ohio, for alleged infringement of the trademark "Listerine." An injunction is asked to prevent the further placing of an alleged inferior article on the market, and also damages because of the profits and advantages which have accrued to the defendant.

The new pharmacy law in the statutes of Oklahoma for 1893, requires that all druggists, apothecaries and other persons, excepting practicing physicians in their ordinary practice, shall keep a record of all sales of any article or articles belonging to the class usually known as poisons; and prescribes a penalty for each violation of a fine of not less than \$20 nor more than \$100. It is said that few druggists in Oklahoma are observing this law.

## Obituary.

Charles W. Acker, a pharmacist of Green Lane and York Pike, Philadelphia, Pa., was found lying unconscious on the floor of his store on Friday night, November 3, and died within a few hours.

Alderman Philip C. Henry, of Henry C. Ahlers, druggists, Bellevue, Iowa, committed suicide recently by cutting his throat. He had never fully recovered from an attack of nervous prostration sustained in September. After dinner he went upstairs and committed the deed. He was 43 years old and much respected.

Henry J. Tilford, of the firm of Bartley, Johnson & Co., the distillers of Louisville, Ky., died recently at the age of 48. Mr. Tilford was a native of Lexington, Ky., and started in business with the wholesale drug house of Wilder & Morris, of New York city, whom he left in 1870 to accept a situation with Bartley, Johnson & Co., eventually becoming a member of the firm.

Dr. Herman Wilhelm Bergner, a well-known retired druggist, died at Reading, Pa., recently of pneumonia, aged 72 years. The deceased was born in Germany, where he graduated with high honors, and arrived in Reading in 1846. He conducted a drug store on Penn street in that city, for forty years and retired a few years ago. He was widely known. His wife died four years ago.

P. E. McKinney, a druggist in the Chatham block, Massachusetts avenue, Indianapolis, committed suicide by taking prussic acid on November 7, and was found dead in the back store at 9.30 o'clock. He was thirty years old, unmarried and leaves a mother, brother and two sisters.

The day previous his creditors closed him out and he felt very much depressed over the affair. He kept a bottle of some unknown but subtle poison in his store, supposed to be prussic acid, and it is thought that he took that. He was a graduate of the pharmaceutical department of the College of Physicians and Surgeons and also of the Ohio Pharmaceutical College. He was an expert druggist, kind hearted, generous, and had a large circle of friends.

### The Austrian Pharmaceutical Society Meets.

The "jubilee" celebration of the thirtieth general meeting of the Austrian pharmaceutical society was opened by a reception at Vienna on the evening of October 18.

At the meeting on October 19 routine business, such as reception of delegates; reading of reports, etc., was dispatched, after which the Reverend Mr. Agnelli, of Csari, read a paper on the cultivation of medicinal plants. Vice-President Gustav Hell presented a paper as the founding of a scientific fund and Dr. Heger submitted a report upon the Pensions Institute and proposed several changes in existing regulations.

At the second session on the morning of the 20th, the question of restraining crude drug dealers from the unlawful practice of pharmacy was discussed by Apotheker Janota of Falkenau, and by Messrs. Hinterhuber, Gutwinski, Eder, Thurnwald, König,

Harna, Labler, and Hell, and Drs. Spatzier and Heilman.

Gustav Hell submitted a report on the question of assistants, and after discussion of this and other trade matters the following officers were elected:

President, Dr. A. Hellmann; first vice-president, Gustav Hell; second vice-president, Ed. Janota; treasurer, Fr. Truka; secretary, Dr. Hans Heger.

The following were elected as corresponding members: Prof. Dr. Beckurts, of Braunschweig; Dr. Schmidt, of Wiesbaden; Prof. Dr. Tschirsch, of Bern, and Dr. Peters, of Nurnberg.

Honorary membership was conferred upon Dr. L. R. v. Karajon, of Vienna.

### International Association of Women Pharmacists.

The International Association of Women Pharmacists in America has now 700 members; their first congress was lately held at Chicago.

The above from *The Hospital*, which is usually accurate in its news items, is rather surprising. Won't some one kindly furnish particulars?

### PHARMACY BOARDS.

**WISCONSIN BOARD OF PHARMACY.**—S. H. Meadows, a druggist, corner of Biddle and Van Buren streets, Milwaukee, has been fined \$50 and costs for having no registered pharmacist in his store. The case was brought by the State Board of Pharmacy, and was in Justice court. The board propose to keep a sharp watch for offenders in this direction.

**PENNSYLVANIA PHARMACY BOARD.**—The State Pharmaceutical Examining Board of Pennsylvania held an examination in the Central High School at Philadelphia on Saturday, October 14, and in the City Council Chambers at Pittsburgh on Monday, October 16, 1893.

Two hundred and seventy-three candidates appeared for examination, one hundred and forty-seven applying for registered pharmacists' certificates, and one hundred and twenty-six for qualified assistants' certificates. Forty-five of the former and fifty-two of the latter class were successful.

The next examination will be held at Philadelphia in January. Applicants for examination should apply to the secretary of the board, Charles T. George, Harrisburg, Pa., after the middle of December, for the necessary blank form of application, and the exact time and place of the examination. Applicants should always state, when applying for blanks, for which certificate they wish to be examined.

**THE NEBRASKA BOARD OF PHARMACY** was reorganized November 11, 1893, at Omaha, by the election of the following officers: President, James Reed, of Nebraska City; vice-presidents, W. D. Haller, of Blair, and Griff Evans, of Hastings; treasurer, C. M. Clark, of Friend, and secretary M. E. Shultz, of Beatrice.

The following named persons were granted certificates of registration by examination, and were issued certificates:

E. Keebaugh, Rising City; C. F. Baughan, Ainsworth, Brown Co.; John Henry Niemen, Fremont; Wm. C. Bishop, Sherman avenue, Kyner block, Omaha; J. A. Roeder, 1323 N. 17th street, Omaha; W. B. Moore, Fairfield; Chas. O. Clims-

dal, Blair; Allen E. Ecker, Lincoln; W. L. Shultz, Neligh, Neb.; R. C. Hesse, 423 S. 10th street, Omaha; E. E. Crady, Sioux City, Ia. (Belden, Neb.); Robert Bohmensson, 12th and Cap. avenue, Omaha; W. E. Mitchell, Gordon; Ira E. Atkinson, Dodge; Frank Simon, Oakland; Geo. McLaren, Shubert; Ben E. Ralston, Wymore; Press Colwell, Burlington Junction, Mo.; Emil Hargens, Missouri Valley, Ia.; L. P. Orth, Pender; M. M. Hicks, Merna, Custer Co., Neb.; Geo. Heinen, 601 Pierce street, Omaha.

Drug business in Nebraska is scarcely up to that of last year, and drug clerks are a drug upon the market. The following committees were appointed by President Reed for the ensuing year: Finance, Griff Evans and W. D. Haller; printing and supplies, M. E. Shultz and C. M. Clark; violation of pharmacy law, W. D. Haller, Blair; Jas. Reed, Nebraska City; C. M. Clark, Friend.

### The Pharmacist in Literature and Politics.

Our note on this subject in a recent issue (September 21, 1893) has elicited the following contribution in rhyme:

#### Why Druggists are not Authors.

The question why our druggists never have a shining star

In the literary firmament that casts a gleam afar,  
Why as novelists and poets they are never known to fame.

Why searching over all the lists we scarcely find a name,

Is one of great importance and we'd like to have some light,

Why they of all men in the world are never known to write?

Now can it be they're all so dull they have no thoughts worth while,

Or that they are incapable of literary style?

Are dunces all compounding pills and selling medicines,

Instead of writing pretty things for monthly magazines?

The question is perplexing, and will some one please explain,

Why they in drugs and chemicals should stupefy the brain?

Now first of all we doubt the fact the question has implied,

But for the sake of argument we'll cast the doubt aside.

Let's look upon the worker in the literary field

To see just how and what he does that fame and fortune yield,

We find that he devotes his time for many hours and days

To reading, thinking, writing and composing of his lays.

But take the common druggist and if he has leisure time,

He puts it on his pharmacy with thoughts quite far from rhyme.

But time is very scant with him and from the morn till night

He wrestles with prescriptions that some doctors best can write.

He's making potions, powders, pills, and selling sundry stuffs,

Toothbrushes, combs, perfumery, and soaps and powder puffs.

His mind is on his business and it daren't stray away,

To make mistake in medicine might turn a life to clay.

When Sunday comes he cannot rest but has to work as well,

And even when asleep at night he fears his jingling bell.

What wonder then the druggist is not weaving idle themes,

With busy mind and hand he has no time to spend in dreams.

You ask me why he doesn't hire an able bodied clerk

To gather in the money, and do all the druggist's work?

And why not keep a carriage, too, and go abroad at times?

Why should he have a shop at all, or care for cents and dimes?

Ah me! how few appreciate these patient, slaving men,

Intelligent or able, they've no time to wield the pen

J. Wolra.

Lewisburg, Pa.

**Cape Logeling a Myth.**

The *Western Druggist* informs us that the "New York Society of Apothecaries met at Cape Logeling on October 4." How (and where) is this, Mr. Fraser?—*American Druggist and Pharmaceutical Record*, Oct. 26.

"Cape Logeling" is a myth and about as correct as some of our journals get things, but the Café Logeling is at 239 E. 58th street and is the headquarters of the N. Y. Society of Apothecaries. Where every pharmacist of N. Y. City should go on the first and third Wednesday of each month to help along a good cause.

Yours truly, T. E. FRASER,  
President New York Society of Apothecaries.

New York, November 8, 1893.

**Notes on French Pharmacy.**

A serious fire occurred recently in the laboratory of the pharmacy owned by M. Alexandre Martin, at the corner of the Avenue Friedland, Paris, and the Faubourg St. Honoré, Paris. The flames spread to the dwelling-rooms, and a quantity of valuable furniture was destroyed or damaged.

The extraordinary results given in France by the vine this year, which may be termed the finest of the century, have attracted the attention of M. Chamberland, a scientist of repute. He finds that the result is due principally to the exceptionally favorable climatic conditions during the budding time in May, and to the very early and long Summer. The vintage is the earliest on record, and was two months sooner than the latest on record in 1816. M. Chamberland says the quality of the wine this year is exceptionally good.—*Chemist and Druggist*.

Some parts of the outside decoration of the Paris School of Pharmacy, and especially the mural decorations of the principal entrance, seem to much need attention. The front is in the form of a cloister, and is exposed the whole year to the weather. This vestibule is ornamented by frescoes by M. Besnard. These have been much admired by connoisseurs, but although the artist's work is completed, a certain number of the pictures have never been put into position. The consequence is that the first part of the decoration has got into a lamentable condition through damp, etc., while the latter part is quite new.

Foreign pharmacists cannot exercise their profession in France without having the French diploma. It is in the power of the Minister of Instruction to dispense with some of the necessary examinations. Hospital apothecaries are allowed to practice during an epidemic; this authorization holds good for three months. A pharmacist can only have one shop, and he must inhabit the locality where he carries on his business. After the death of a pharmacist the heirs can carry on the business for a year, provided that another pharmacist is placed in charge.

It is forbidden to a medical man to have any understanding with a pharmacist concerning the sale of drugs. In those localities where there is not a pharmacist the medical man can supply his patients with medicine. In order to be prepared for urgent cases, medical men, even where there are one or two pharmacists, can keep certain drugs, which will be mentioned in a list drawn up by the authorities. In every department there will be an inspector pharmacist. This

body of pharmaceutical inspectors will be chosen by the *Comité Consultatif d'Hygiène*, and ratified by Government.

**Doctors and Druggists in Japan.**

A sad state of affairs is said to prevail in Japan, where the old and the new, native and foreign ideas do not harmonize; while custom clings to the old. The doctor formerly dispensed his drugs, receiving cash for them, and a present of cakes, eggs, or fish for his advice, and if the patient forgot the cash, the doctor was too polite to ask for it. With the advent of foreign medicine came the retail druggist. But as he got all the cash, and the doctor could not live on cakes and eggs, the latter was compelled to return to his dispensing in order not altogether to forget what cash looked like. But now the drug men clamor for the government to restrain the doctor, and forbid his dispensing drugs.

Local correspondents are wanted for this paper. For particulars, address the Editor.

**Patentees' Exhibition at Copenhagen.**

The Industrial Society of Copenhagen intend in January, possibly also in February, 1894, with the co-operation of The Copenhagen Patent-Office to arrange a special exhibition of such new inventions as may be considered likely to be used in Denmark, Norway and Sweden, and especially such as it must be supposed will be of interest for the handicrafts and industrial establishments of these countries. No charge will be made either for space or for the motive force, which the society disposes of. The notification on the other side must be sent in latest on December 1, 1893, to The Industrial Society, Copenhagen, V.—The exhibition will be opened Friday January 5, 1894.

Intending exhibitors should send applications as early as possible and not later than December 1, to the Industrial Society, Copenhagen V. Denmark. In making application for space, the following particulars should be given: Name of exhibit, whether the invention itself, a model or a drawing is to be shown, space desired on floor, table or wall, motive force required if any, is the invention patented in Scandinavian countries, if so, where? Is the patent for sale, and if so, on what conditions?

The Copenhagen Patent Bureau is a private corporation.

**Bad Drugs.**

It is strange that some physicians pay so little attention to the quality of the drugs they use. For illustration, salicylic acid can be bought at low prices, varying from twenty-five cents to two dollars and a half per pound; the cheap salicylic acid produces gastric stomach troubles and dangerous effects on the circulation, while the pure acid ordinarily promptly relieves rheumatic pain without stomachic disturbance. The ordinary bromides of commerce, in consequence of their faulty manufacture, contain iodides and bromates, and, hence, not only prove inefficient in practice, but possess dangerous effects. Therefore great care should be taken to purchase from good

houses, and to give a fair price. *It is criminal to use cheap drugs.*

**The New Bacillus of Koch.**

Dr. Koch has been recently married. According to a French newspaper, it was at the theater the celebrated German bacteriologist made the acquaintance of the lady he has just espoused. At first sight he completely lost his head, and, forgetful of his wife and children, he had but one thought—to get a divorce, and to marry her of whom he had become enamored. At Berlin, people laughed at this amorous fit of the great savant, and his new wife has been baptised with the name of "Bacillus of Koch."

Local correspondents are wanted for this paper. For particulars, address the Editor.

**The "Substitutor" and the Testimonial Writer.**

A widely-spread advertising circular of a proprietary drug preparation presents a picture of the substitutor cheating the father of a dying child. The father comes asking for the advertised cure-all. The substitutor is a drug clerk with devilish leer, satyr ears, and mephistophelian horns. The legend given therewith is as follows:

We present on the opposite page a photograph of a modern nuisance of the vampire order. The smile on his infectious and brazen face poisons the very atmosphere as does the hated lupus tree, and his presence is the shadow of death. Unfortunately for the sick and the dying, this incarnation of evil lurks in drug stores of doubtful reputation, and practices his arts and wiles upon his innocent and unsuspecting customers. In the picture before you a father has come in haste for a special remedy for his sick child. The mother, whose soul is filled with anxiety, is impatiently waiting his return with the medicine for her precious darling. The substitutor replies that he is out of it, but has something "just as good or better."

The parent hesitates, time flies, he is over-persuaded, he grasps at the substitutor's nostrum, and the chances are that the little one is doomed. The vampire substitutor lives upon the death of his victims. Is there any abyss too deep, any punishment too severe for the miscreant who will thus trifle with human life and love for the smallest gain? Room for the leper, room.

The literary and ethical excellencies of this remarkable product of the professional advertisement-writer are on the same level. If the substitutor's face is infectious, why doesn't the poor dupe catch the disease (of scoundrelism), and in the interests of dermatology we would like some further information about the "hated lupus tree."

But the laughter excited by this execrable stupidity is quickly transformed to disgust and indignation when it is remembered that not even the mephistophelian substitutor would ply his "vampire's" trade on the poor father if the poor father had only brought a physician's prescription. Would the sensible father of a dying child go to a drug store for a "special remedy" or would he go to a physician? The advertiser's pamphlet is equal to the emergency—but only by implication, its most prominent claim being the published "testimonials of six thousand well-known physicians." Among these we notice two presidents of the American Medical Association, surgeon-generals, professors and professors, and professors, doctors galore, and fellows with as many as thirteen alphabetic titular tin-kettles to their tails, "M.R.C.S.I., L.R.C.P.I., L.S.A.," etc., world without end. Amen!—*Medical News*.

Local correspondents are wanted for this paper. For particulars, address the Editor.

## With the Advertisers.

Southern Pines, Moore County, North Carolina, is a new Winter health resort just coming into prominent notice. It is located in the high, dry, long-leaf pine sand hills, amid the tar, pitch and turpentine district. Thousands of Northern invalids have visited the place and many remarkable cures have been effected. Prominent physicians have visited the place, for investigation and without a single exception say it is the best in the United States, and we are specially requested by John T. Patrick, Commissioner of Immigration for the Southern States, to invite physicians of the Northern and Western States to visit the place and investigate in the interest of their patients.

Any physician desiring information can address Mr. Patrick at Pine Bluff, N. C.

## Capillusia for the Hair.

Druggists are quite often asked by youths who yearn for a hirsute appendage, men of middle age who mourn the passing of their scanty locks, and by maidens anxious to add to the length of their flowing tresses, for a simple compound likely to satisfy their requirements; and it is frequently a matter of difficulty for the druggist to decide properly as to what preparation will best answer the purpose indicated.

To all such we would say, lay in a stock of Clark's "Capillusia for the Hair." It is one of the few preparations free from grease and adapted to almost all forms of baldness, weakness of the scalp and capillary tissues.

Samples and further particulars can be obtained from the maker, A. M. Clark, 136 Liberty street, New York.

## Otto of Rose Prices.

Those who are partial to that most exquisite and costly of all scents, Otto of Rose, will be interested to learn that the peasants who produce it in Bulgaria have largely given up raising grain in order to raise roses. Whereas the price of Otto in large quantities three years ago came out at a cent a drop, it now reaches from 2 to 4 cents a drop. Eight teaspoonfuls (an ounce) of Otto would now cost from \$10 to \$15, and a small canister, not as large round as a dinner plate and about three inches thick, would cost from \$1,000 to \$1,500. The unprecedented demand appears to have been largely created by the "Vinolia" Soap Co., which consumes annually thousands of pounds worth of Otto in toilet "Vinolia" soap, and which has advertised an Otto toilet soap everywhere and so popularized this scent to an unprecedented extent.

There has been quite a storm among the manufacturers of toilet scents in France and elsewhere in consequence of the present high price, due to a certain firm of agents in Turkey buying up the bulk of Otto and so running up the price. Many manufacturers will now have to raise the prices of their products or else reduce the quantity they use of the expensive Otto. The manufacturers of "Vinolia" soap are advertising that the price and quality of "Vinolia" soap shall not be altered, but it

is currently reported that they are not making any profit this year on their Otto toilet soap, though they held a very large quantity of the scent before the present extraordinary prices were reached.—*Exchange.*

## Notes on Prices.

### ESSENTIAL OILS.

Fritzsche Brothers, 34 Barclay street, New York, branch of Schimmel & Co., Leipzig and Prague, have issued a circular regarding the adulteration of citronella oil which it appears has extended in a remarkable degree in Ceylon during recent years.

It has been found that the adulteration usually consists in the admixture of either a fatty oil (probably coconut oil) or petroleum (kerosene oil). Such admixtures can easily be detected by the following test:

One part of citronella oil when well shaken in a graduated glass cylinder with ten parts of 80 per cent. alcohol (spec. gravity 0.8645 at 15° C.) should yield a clear or only slightly opalescent solution from which no oil drops separate out on standing.

The oil itself when not rectified should have a specific gravity of not less than 0.895 at 15° C.

If the oil has been adulterated by the addition of fatty oil or petroleum it will afford a more or less turbid mixture when shaken with the 80 per cent. alcohol, and after standing for about twelve hours drops of oil will usually separate, either on the surface or at the bottom of the liquid, according to the specific gravity of the adulterant.

The above test is so extremely simple that Schimmel & Co. have recommended its adoption for the control of the quality of the oil purchased from the native distillers, and it can also easily be applied by pharmacists and other consumers of this oil who desire to assure themselves of its purity.

## Review of the Wholesale Market.

NEW YORK, November 14, 1893.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

There is still an absence of important demand in the market for drugs, dyestuffs and chemicals, but the situation is regarded as more encouraging, there being a noticeable increase of jobbing orders from interior traders. Values upon most lines are maintained with a fair show of steadiness. Ethers are quoted higher, as are also oils of sesame and lemon grass, gum benzoin, balsam of copaiba, and Mexican sarsaparilla. Opium, cacao butter and celery seed are raised.

### DRUGS.

ALCOHOL is steady at \$2.24 @ \$2.28 for Grain.

ARNICA FLOWERS have continued quiet, though there is no urgency to realize; 10½ @ 11c. is asked as to quality.

BALSAM COPAIBA is in steady, fair request, with sales of Central American at 33½ @ 36c.

BALSAM FIR, Oregon, is quiet at 70c. spot.

BALSAMS PERU and TOLU are without important change either as regards price or demand.

BUCHU LEAVES, short, continue dull with the quotation 12 @ 16c.

CACAO BUTTER, Dutch, bulk, is dull at the moment but the market appears well sustained at 33 @ 34c.

CALENDULA FLOWERS are hardening; old crop is offered at 20c.; new to arrive is held at 28 @ 30c.

CASTOR FIBER, Russian, continues scarce with \$16 asked.

COLOCYNTH APPLES meet with moderate attention at the previous range. Reports from Trieste indicate a poor crop this season, and prices there are firmer in consequence.

BELLADONNA LEAVES are firmer with up to 11½c. now asked for best grades. Sales of 1,000 lbs. reported at this figure.

COCAINE MURIATE is cabled higher abroad, but quotations here remain unchanged.

ERGOT is a trifle firmer. Spanish has sold in the interval at 30 @ 32c. German in instances offers at 27c., though some in the trade are firmer in their views and quote 28 @ 30c.

JUNIPER BERRIES are in limited stock, and in consequence only jobbing parcels are offered. We quote the range at 2 @ 2½c.

LYCOPodium has sold for forward shipment to the extent of 25 cases at a shade below 48c. laid down, but for additional parcels 68½c. is now asked. The spot value is nominally 58 @ 59c.

MANNA is steady at 85 @ 90c. for Large Flake and 35 @ 37c. for Small.

MENTHOL is yet scarce and firm at \$4 @ \$4.10 for ordinary Japanese.

OPUM continues dull and neglected; concessions do not appear to materially stimulate interest and the market is depressed in consequence. Single cases are quoted \$2.40, jobbing at \$2.42½ @ \$2.45, and powdered \$3.15 @ \$3.25.

ORANGE PEEL, sweet, has been inquired for during the week and among recent transactions is included one sale of 500 pounds at 4½c.

QUININE continues fairly active, without, however, any important sales, as speculative activity appears to have subsided. Foreign brands in large tins are passing out at 19½c. cash and 19½c. regular terms from outside hands. Manufacturers quote 20c. for forward delivery.

SENNA LEAVES are in moderate consumptive demand at the quoted range.

WAX Japan, is easier owing to recent arrivals. Jobbing parcels are now obtainable at 7½ @ 8c. Brazil is yet scarce and firm at quotations.

### DYESTUFFS.

CUTCH is in moderate demand at about previous prices, say 4½ @ 4¾c. for round parcels, and 4½ @ 4¾c. in a jobbing way for SM.

GAMBIER continues firm at 3½ @ 3.90c. for wharf goods and 4 @ 4¾c. for store as to quantity.

INDIGO does not vary from the quoted range; the statistical position of this article is still regarded as good.

SUMAC remains quiet but firm at \$70 @ \$75 for Sicily, spot and to arrive.

ARSENIC, white, is in steady fair demand, though the available supply is light; quoted 3½ @ 3¾c. as to quantity and brand.

BLEACHING POWDER is maintained steadily with a fair inquiry both for spot and forward goods; outside parcels continue

to offer below agents' prices, say 1.95c. for French and 2.10c. @ 2c. for English.

BLUE VITRIOL continues to find sale in a moderate way at the range of  $3\frac{1}{4}$  @  $3\frac{1}{2}$ c. as to quantity and brand.

BRIMSTONE, crude, for forward delivery is reported dull and easy.

CHLORATE OF POTASH continues dull at the quoted range of  $14\frac{1}{4}$  @  $14\frac{1}{2}$ c. for crystals and  $14\frac{1}{4}$  @ 15c. for powdered.

ETHER has been advanced by the principal makers and is now quoted 56, 60 and 63c. for U. S. P., Washed and Concentrated respectively. Compound spirit of ether (Hoffman's Anodyne) is also higher, with commercial held at 48c. @ 49c. as to quantity, and U. S. P. 73 @ 74c. Spirit of nitrous ether has likewise advanced, and the quotation now stands 40 @ 42c. as to quantity.

NITRATE OF SODA remains quiet, but the quotations of the market do not change materially, \$1.87½ @ \$1.95 being required as to quantity.

PRUSSIAN OF POTASH, yellow, is now held at the uniform quotation of 19½c. for 50,000 lbs. and over and 20c. for less quantities, these being the figures agreed upon by the American, German and Scotch makers.

QUICKSILVER and other staples are quiet at nominally unchanged prices.

#### ESSENTIAL OILS.

ANISE remains quiet, though the market remains steady at \$1.40 @ \$1.45.

BERGAMOT is in rather limited demand, but apparently steady at \$1.75 @ \$2.65.

CASSIA continues to offer at 80 @ 85c. for native.

CUBEB in a jobbing way is held at \$2,

though \$1.90 would be accepted for jobbing parcels.

LEMONGRASS is firmer with in some instances 50c. asked.

PEPPERMINT is reported as in better demand and the tone of the market is regarded as stronger, particularly for bulk goods. Western is held at \$2.25 @ \$2.30 and Wayne County at \$2.40 @ \$2.45. HGH does not offer below \$2.70. The stock is closely concentrated.

#### GUMS.

ALOR, Curacao, is in fair jobbing demand at  $2\frac{1}{2}$  @ 3c. as to quantity.

ARABIC, white picked, has sold during the week to the extent of 25 cases at  $18\frac{1}{2}$  @ 21c.

ASAFETIDA is jobbing quite freely and at well sustained prices, particularly for the better grades, which are scarce.

BENZOIN is well maintained at the range of 35 @ 40c.

CHICLE is firmer and now quoted 24c. inside.

SHELLAC is firm in view of recent cable advices from London reporting an advancing and firm market. The demand is light.

TRAGACANTH remains nominally unchanged.

#### ROOTS.

ACONITE is in moderate demand with small sales. German at 11 @ 14c. as to quality and quantity.

CALAMUS is held about as before say 7 @ 8c. for ordinary goods and 30 @ 35c. for bleached.

COLCHICUM is firmer with  $10\frac{1}{2}$  @ 12c. now asked as to quality.

GINGER, unbleached Jamaica, is firmer with 15c. an inside value.

GOLDEN SEAL is in lighter supply and at 22c. is now quoted steady.

IPECAC is maintained at \$1.15 @ \$1.20. Demand, however, is limited.

JALAP is in light supply and firm at 28 @ 30c.

LOVAGE, American, new crop, is in fair supply and held at 55c.; old crop, German, is quoted at 65 @ 75c. and new to arrive at qtc.

PINK remains quiet but steady at 24 @ 30c. as to quality.

SARSAPARILLA, Mexican, is almost out of market, and quotations at the moment are nominal.

SENEGA continues scarce and firm at 45c. SNAKE offers at the range of 26 @ 28c., but trade is restricted owing to limited stock.

#### SEEDS.

CANARY is jobbing at  $2\frac{1}{2}$  @  $2\frac{1}{2}$ c. In a large way probably  $2\frac{1}{2}$ c. could be done.

CARDAMOMS are firmer but not quotably higher.

CELERY appears unsettled for the moment in consequence of small surplus parcels coming in from interior sections and the pressure to realize. Recent sales have been down to the point of 16½.

CORIANDER, unbleached, is in fair supply and held at 5½c.

FENNEL, new crop, German, is passing out in small jobbing lots at 10½c.

HEMP, Russian, spot is held at 3½c.

MUSTARD has been actively inquired for during the week and is gaining strength. Higher prices are looked for.

Bernard Gilpin, of Gilpin, Langdon & Co., Baltimore, is in the city on a brief visit.

## Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted one time free; for each additional insertion Fifty Cents. Write distinctly, on one side of paper only, and do not use postal cards.*

#### POSITIONS VACANT.

LOCAL CORRESPONDENTS WANTED in all the larger cities of the United States; must be in close touch with the drug trade. Address EDITOR AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD, 37 College place, New York.

#### POSITIONS WANTED.

WANTED POSITION as sugar-coater by young man of good habits. For further particulars and samples of work. Address C. O. Ater, at this office.

GRADUATE of N. Y. C. P. registered in Connecticut and New Jersey, desires permanent position; good references. Address Box 37, West Morris, Conn.

POSITION WANTED by a graduate of N. Y. C. P., 35 years old; single; registered in N. Y., N. J. and Conn.; 10 years' practical experience; fully competent to manage. "Lithium," care this office.

POSITION WANTED.—Drug clerk; assistant in Ohio; 4 years' experience; can do anything from porter to prescription clerk; will go anywhere; salary small. "Borate," this office.

POSITION WANTED by December 15 by a young man of 7 years' experience in pharmacy; registered by examination in Ohio and Pennsylvania; best of reference furnished. George S. Morron, Derry Station, Pa.

LADY graduate, experienced, wishes position in drug store or dispensary, city or country; A1 reference. Address "Pharmacist," at this office.

RELIEF SITUATION WANTED for evenings by thoroughly posted pharmacist of 20 years' experience. Address "Able," this office.

DRUGGIST'S RELIEF CLERK, evenings and Sundays Chas. F. Antz, 417 West 30th street.

WANTED.—Position as second clerk in a Brooklyn drug store; 25 years old; 5 years' experience; A1 references on all points. Address "E. C. B.," at this office.

POSITION WANTED by Ph.G., of 10 years' experience; licensed in New York and Pennsylvania. Address J. W. Beckwith, 624 Warren St., Syracuse, N. Y.

POSITION WANTED.—Have had 9 months' experience; age 18; speak German fluently; no bad habits; will serve as apprentice in a suitable place; can come well recommended. Address H. G. Cordes, Wellsville, N. Y.

A THOROUGH PHARMACIST and a hustler wants a position either inside or on the road; best of experience and references; bonds given if necessary. Address "Hustler," this office.

GERMAN SPEAKING druggist, long experience as botanic druggist, seeks situation of any kind; salary moderate. Address Robert Paul Hofman, 10 Rector street, New York city.

WANTED.—Position as drug clerk in city or country by a young man of good moral character, having four years' experience; graduate New York C. P., '93; licensed in New York State; good references. Address "Phenacetine," 51 Blandina street, Utica, N. Y.

DRUG CLERK wants situation; reference from last employer. Address "M. C. W.," this office.

WANTED AT ONCE, position in drug store in Conn.; Rhode Island or Mass.; have had five years' experience, and can give good reference. Address "B," 15½ Main street, New London, Ct.

A POSITION WANTED in city or country pharmacy; have had about five years' experience in the business; for the last seven months have had charge of Richtmyer's pharmacy; good references. W. B. Corbin, Cooperstown, N. Y.

#### BUSINESS OPPORTUNITIES.

FOR SALE.—One of the best paying drug stores in Indiana, county seat; net profits, \$2,500 per year. Address "Profitable," this office.

STORE TO LET.—First-class place for drug shop; 115 and 117 Wright street, near Broad street; rent \$9 per month. F. Beyer, 111 Wright street, Newark, N. J.

DRUG STORE WANTED.—I want to buy a drug store in good town. Address "Bromo," care AMERICAN DRUGGIST, 37 College place, New York City.

I WANT to purchase a drug store in good locality commanding a good prescription and general drug trade; invoice \$3,000 to \$4,000; can furnish cash and security. Address "Caribale," at this office.

A GOOD drug store, valued at \$4,500, is for sale in New Jersey for only \$2,000, if bought at once; sales average about \$23 daily. Address "Creta," at this office.

FOR SALE.—Stock, machinery and trademark for the manufacture of gelatine capsules. Address 190 Third avenue, Brooklyn, N. Y.

TO RETIRE.—I offer fine fixtures, stock and trade worth \$2,500, for \$1,500, spot cash. Address "Doctor," 24 Colden street, Newburg, N. Y.

WANTED.—Complete volumes of the PHARMACEUTICAL RECORD for 1887, 1888, 1889, 1890, 1891 and 1892; either bound or unbound, preferably the former; state price and condition of volumes. F. J. Wulling, Minneapolis, Minn.

OPPORTUNITY for a young man to purchase a store doing \$8 per day; no cutting; 60 per cent. profit; rent \$18; near New York city; small capital; for \$1,350, part cash, balance on notes maturing monthly. There is more to be said about this offer that may be learned by addressing the owner. Address "Lawyer," care this office.

FOR SALE.—A fine drug store in Indiana town doing a \$10,000 business; this is a chance to buy a good business that is worth investigating. Address "Indiana," this office.—25.

FOR SALE.—A good drug business in a growing manufacturing city of 30,000 inhabitants; store located in the center of city; well stocked; doing a prescription business of from 20-30 a day; a good chance for the right man. Address "Vern," this office.—21.

FOR SALE.—Drug store in a manufacturing city in New Jersey; population 45,000; established 18 years; trade \$6,000; price \$3,000; half cash. Address "Faunce," at this office.

**Clerks and Employers should call at this office, register their wants and examine our list of POSITIONS WANTED POSITIONS VACANT and BUSINESS OPPORTUNITIES, which can be consulted free of charge.**

# ORIGINAL PACKAGE PRICES.

It should be understood that the prices quoted in this column are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a considerable range of prices.

## Drugs, Chemicals, &c.

|                           |       |       |
|---------------------------|-------|-------|
| Aconitid, bulk, per lb.   | .35   | .36   |
| " " " " " "               | .35   | .36   |
| " " " " " "               | .35   | .36   |
| Acetate of lime:          |       |       |
| Brown, per 100 lb.        | .90   | .95   |
| White, per lb.            | .01   | .01   |
| Adiantum:                 |       |       |
| Adetic Com'l pr 100 lb.   | 1.87  | 1.12  |
| Aquaforis, 36 deg.        | .03   | .04   |
| " " " " " "               | .03   | .04   |
| Benzoin, German.          | .47   | .54   |
| " " " " " "               | .47   | .54   |
| Eucalypt, Whole.          | .13   | .14   |
| " " " " " "               | .13   | .14   |
| Citric, American.         | .44   | .46   |
| " " " " " "               | .44   | .46   |
| Carbolic Crystals:        |       |       |
| bulk.                     | .13   | .17   |
| lb. bottle.               | .20   | .21   |
| Mercuric, 36 deg.         | .85   | .85   |
| Nitric, 36 deg.           | .03   | .04   |
| " " " " " "               | .03   | .04   |
| Oxalic, English.          | .06   | .06   |
| " " " " " "               | .06   | .06   |
| Pteric.                   | .06   | .06   |
| Sulphuric.                | 1.00  | 1.00  |
| Tartaric, Crystals.       | .06   | .06   |
| " " " " " "               | .06   | .06   |
| Tannic.                   | 1.05  | 1.00  |
| Alcohol, Grain, per gal.  | .24   | .28   |
| (Less rebate.)            |       |       |
| Wood, 95/97.              | 1.00  | 1.05  |
| Alcoholene.               | .05   | .05   |
| Alum, Lump, per 100 lb.   | .15   | .15   |
| Ground, per 100 lb.       | .15   | .15   |
| Antifebrine per oz.       | .10   | .10   |
| Antipyrine, per oz.       | 1.20  | 1.40  |
| Arrowroot, Berm., lb.     | .24   | .25   |
| St. Vincent, in bbl., lb. | .11   | .11   |
| Arsonic:                  |       |       |
| Red Saxon, lb.            | .05   | .06   |
| White.                    | .05   | .06   |
| Balsam, Copaiba, lb.      | .33   | .33   |
| Fir, Canada, gal.         | 3.00  | 3.35  |
| Fir, Oregon, gal.         | .70   | .70   |
| Peru, lb.                 | 1.30  | 1.40  |
| Tolu, lb.                 | .23   | .25   |
| Bark, Buckhorn, per lb.   | .07   | .09   |
| Cascara Sagrada, lb.      | .06   | .07   |
| Eim, lb.                  | .10   | .11   |
| Orange peel.              | .06   | .07   |
| Sassafras, per lb.        | .06   | .07   |
| Soap, lb.                 | .03   | .04   |
| Bicarb. Soda, Engl., lb.  | .03   | .03   |
| domestic, lb.             | .02   | .03   |
| Bichromate, Pot'h, lb.    | .10   | .11   |
| Bismuth, Sub. Nit.,       |       |       |
| per lb., bulk.            | 1.95  | 2.00  |
| Bismuth, Sub. Carb.,      |       |       |
| per lb., bulk.            | .05   | .05   |
| Black'g Powd., per lb.    | .05   | .05   |
| Blue Vitriol, lb.         | .03   | .03   |
| Borax, refined, lb.       | .07   | .08   |
| Concentrated, lb.         | .07   | .08   |
| Bromine, best ad, 10.00   | 10.00 | 10.00 |
| Bromide Potash, Do-       |       |       |
| mestic, b'l., lb.         | .35   | .36   |
| bottles, lb.              | .43   | .44   |
| Bromide Ammonium,         |       |       |
| bulk.                     | .43   | .44   |
| Bromide Sodium, b'l.      | .40   | .41   |
| Bromine, bulk.            | .43   | .45   |
| Burgundy pitch, per lb.   | .03   | .04   |
| Cacao Butter:             |       |       |
| 1-lb. boxes, lb.          | .34   | .34   |
| Dutch A., per lb.         | .33   | .34   |
| Caffeine.                 | 1.00  | 1.05  |
| Camphor, red'd, bbla, lb  | .45   | .45   |
| cases, lb.                | .46   | .48   |
| Cantharides, Chinese, lb. | .08   | .30   |
| Russian, lb.              | .70   | .75   |
| Carb. Ammonia.            |       |       |
| casks, lb.                | .08   | .08   |
| Cassia Buda, lb.          | .18   | .19   |
| Castor Oil, cases, lb.    | .15   | .15   |
| Barrels, lb.              | .14   | .15   |
| Caustic Soda, 70, 100 lb. | .80   | .87   |
| Caustic Soda, 60, 100 lb. | .80   | .87   |
| Chalk, Engl. Precip.,     |       |       |
| bulk, lb.                 | .04   | .06   |
| Chloral Hydrate Cryst-    |       |       |
| als, bulk, per lb.        | .05   | 1.10  |
| Hydrate crystals, bulk,   |       |       |
| per lb.                   | .00   | 1.05  |
| Chlorate Pot. Cryst., lb. | .14   | .14   |
| Pow'd, lb.                | .14   | .15   |
| Chloroform, Bulk, lb.     | .50   | .55   |
| Chloroform, Sulphate      |       |       |
| of German, oz.            | .08   | .08   |
| Citrate, U.S.P. Iron, lb. | .50   | .50   |
| Soluble.                  | .50   | .55   |
| Iron and Ammonia, lb.     | .50   | .50   |
| Iron and quinine.         | 1.50  | 1.55  |
| Iron and strychnine.      | 2.00  | 2.05  |
| Phosphate U.S.P. lb.      | .57   | .57   |
| Pyrophos, U.S.P., lb.     | .55   | .55   |
| Pyrophos, Soluble, lb.    | .55   | .55   |
| Potash, per lb.           | .40   | .40   |
| Soda, per lb.             | .40   | .40   |
| Cobalt, pow'd, lb.        | .20   | .20   |
| Cocaine Murate, per oz.   | 4.95  | 5.30  |

|                            |       |       |
|----------------------------|-------|-------|
| Codaine, bulk, oz.         | 4.25  | .00   |
| Codaine, eight.            | 4.65  | .00   |
| Cod Liver Oil, Nor-        |       |       |
| wegian, bbla.              | 18.50 | 25.00 |
| Colocynth:                 |       |       |
| Trieste, lb.               | .87   | .38   |
| Spanish.                   | .80   | .84   |
| Copperas, per 100 lb.      | .80   | .90   |
| Cr. Tartar, Crystals, lb.  | .18   | .19   |
| Powdered, lb.              | .18   | .19   |
| Cube Berries, X.X., lb.    | .83   | .85   |
| Ordinary, lb.              | .18   | .18   |
| Cutch, bales, SM, lb.      | .04   | .04   |
| Cutch, boxes, lb.          | .09   | .09   |
| Cattle bones, Trieste, lb. | .10   | .11   |
| Jewellers, lb.             | .35   | .35   |
| Dextrine.                  | .04   | .05   |
| Divi Divi, per ton.        | 50.00 | 60.00 |
| Dragon's B'd, lump, lb.    | .45   | .50   |
| In reeds, lb.              | .45   | .50   |
| Epsom Salts, per 100 lb.   | 1.10  | 1.20  |
| Ergot:                     |       |       |
| C'm'n and Ross'n, lb.      | .27   | .30   |
| Spanish, lb.               | .30   | .32   |
| Ergotine, Domestic.        | .40   | 4.00  |
| German.                    | 4.00  | .11   |
| Flowers:                   |       |       |
| Arnica Flowers, per lb.    | 10.00 | .11   |
| Chamomile.                 |       |       |
| German, New, lb.           | .27   | .24   |
| Roman, New, lb.            | .27   | .28   |
| Roman, lb., old.           | .15   | .15   |
| Lavender Flowers           |       |       |
| Ordinary, per lb.          | .04   | .08   |
| Select, per lb.            | .15   | .15   |
| Gambier, lb.               | .03   | .04   |
| Glycerin, bbla, lb.        | .03   | .13   |
| cases, lb.                 | .14   | .18   |
| Grains, Paradise, lb.      | .06   | .07   |
| Guarana, lb.               | 1.00  | .11   |
| Gums:                      |       |       |
| Aloes, Barb, lb.           | .06   | .12   |
| Cape, lb.                  | .05   | .06   |
| Curacao, lb.               | .05   | .06   |
| Socotrine, lb.             | .30   | .40   |
| Arabic 1st picked.         | .47   | .55   |
| ad.                        | .34   | .36   |
| Arabic, sorts.             | .11   | .12   |
| Asafetida, lb.             | .09   | .05   |
| Benzoin, lb.               | .35   | .40   |
| Chicle, lb.                | .23   | .24   |
| Gamboge, lb.               | .58   | .54   |
| Guaiac, lb.                | .16   | .22   |
| Kino, lb.                  | .75   | 1.00  |
| Mastic, lb.                | .65   | .70   |
| Myrrh, lb.                 | .20   | .38   |
| Olibanum, sorts, lb.       | .05   | .06   |
| tears, lb.                 | .11   | .13   |
| Sandal, lb.                | .20   | .30   |
| Senegal, picked, lb.       | .14   | .60   |
| sorts, lb.                 | .09   | .10   |
| Shellac, DC, lb.           | .34   | .35   |
| VSO, lb.                   | .29   | .30   |
| Diam'd, lb.                | .29   | .29   |
| SS, lb.                    | .29   | .29   |
| TN, lb.                    | .26   | .27   |
| Garnet.                    | .26   | .24   |
| Bleached, lb.              | .30   | .31   |
| Tragacanth, Aleppo, lb.    | .30   | .56   |
| Harlem Oil.                | .00   | .50   |
| Indigo, lb.                | .45   | 1.05  |
| Insect Flowers.            | .19   | .20   |
| Insect Powder, pure, lb.   | .16   | .20   |
| Iodide Potash, bulk, lb.   | 2.75  | 2.80  |
| bot'd, lb.                 | 2.83  | 2.88  |
| Isinglass, Am'r'n, lb.     | .47   | .60   |
| Japan, lb.                 | .35   | .35   |
| Juniper Berries, lb.       | .00   | .00   |
| Leaves:                    |       |       |
| Belladonna, per lb.        | .09   | .11   |
| Buchu, short, lb.          | .25   | .14   |
| " long, lb.                | .25   | .25   |
| Coca, prime, lb.           | .25   | .32   |
| Damiana, lb.               | .16   | .16   |
| Hyocymus.                  | .07   | .08   |
| Jaborandi, lb.             | .45   | .50   |
| Senna Alex nat'l, lb.      | .18   | .25   |
| Senna Alex garbled lb.     | .28   | .27   |
| Senna Tinney, lb.          | .06   | .18   |
| Stramonium.                | .05   | .08   |
| Licorice, P. & S., lb.     | .24   | .24   |
| Lupulin, German.           | .45   | 1.75  |
| Lycopodium, lb.            | .58   | .50   |
| Manna, large flake, lb.    | .85   | .90   |
| Small flake, lb.           | .35   | .37   |
| Menthol, Japanese.         | 4.00  | 4.10  |
| Mercurials:                |       |       |
| Blue Pill, lb.             | .32   | .34   |
| Caomel, lb.                | .71   | .71   |
| Cor. Sublimite, lb.        | .62   | .62   |
| Mercury and Chalk.         | .30   | .30   |
| Ointment, lb.              | .38   | .39   |
| Red Precipitate, lb.       | .81   | .81   |
| White.                     | .86   | .86   |
| Morphine, bulk, oz.        | 1.00  | 2.05  |
| Eights, oz.                | 2.25  | 2.30  |
| Moss, Irish, lb.           | .06   | .06   |
| Irish, bleached, lb.       | .23   | .23   |
| Muriate Potash, per 100    |       |       |
| lb.                        | 1.78  | 1.85  |
| Naphthaline, flake, per    |       |       |
| lb.                        | .03   | .03   |
| Naphthaline, Ball, per     |       |       |
| lb.                        | .04   | .04   |

|                           |      |      |
|---------------------------|------|------|
| Nitrate Silver, oz.       | .47  | .48  |
| Nitrate Soda, 100 lb.     | 1.85 | 1.95 |
| Nux Vomica, lb.           | .03  | .04  |
| Nutgalla, China, per lb.  | .13  | .13  |
| Aleppo, per lb.           | .14  | .14  |
| Oils, Essential:          |      |      |
| Anise.                    | 1.40 | 1.45 |
| Almonds, Bitter.          | .70  | 7.50 |
| Sweet.                    | .80  | .43  |
| Bay, per lb.              | 3.50 | 4.08 |
| Cergamot.                 | 1.75 | 2.05 |
| Cajuput, Native.          | .35  | .45  |
| Camphor.                  | .07  | .08  |
| Cassia.                   | .80  | .85  |
| Citronella, Native.       | .24  | .28  |
| Clove.                    | .50  | .55  |
| Copaiba.                  | .65  | .70  |
| Croton.                   | .75  | .80  |
| Cubeb.                    | 1.90 | 2.00 |
| Ergeron, per lb.          | 1.45 | 1.50 |
| Geranium Charis.          | 4.50 | 7.50 |
| Lavender.                 | 1.80 | 1.85 |
| Lemon, as to brand.       | .95  | 1.80 |
| Lemongrass.               | .70  | .70  |
| Musk, per lb.             | 7.00 | 8.00 |
| Myrrh.                    | .17  | .19  |
| Neroli.                   | .25  | .28  |
| Nutmeg.                   | 1.75 | 2.75 |
| Orange.                   | 1.40 | 1.65 |
| Origano.                  | 1.00 | 1.10 |
| Peppermint, bulk.         | 2.80 | 2.40 |
| HGH.                      | 2.60 | 2.65 |
| Rose.                     | 7.50 | 8.00 |
| Sandalwood.               | .70  | .85  |
| Sassafras.                | .34  | .37  |
| Sassafras, Artificial.    | .25  | .25  |
| Spearment.                | 1.50 | 1.80 |
| Tansy.                    | 2.00 | 3.00 |
| Wintergreen.              | 1.55 | 1.60 |
| Artificial.               | .90  | .90  |
| Wormwood.                 | 2.15 | 2.25 |
| Opium, Natur'l, per       |      |      |
| lb.                       | .20  | 2.40 |
| Opium, Ordinary.          |      |      |
| Jobbing, per lb.          | 2.45 | 2.45 |
| Opium, Powd., per lb.     | 3.15 | 3.25 |
| Phenacetine, per oz.      | .85  | 1.00 |
| Prussiate Potash, Yel-    |      |      |
| low, per lb.              | .28  | .23  |
| Red, per lb.              | .39  | .42  |
| Quicksilver, flasks, per  |      |      |
| lb.                       | .52  | .54  |
| Quinine:                  |      |      |
| Domestic, bulk, oz.       | .28  | .28  |
| Domestic, oz.             | .28  | .29  |
| German, bulk.             | .19  | .19  |
| German, oz.               | .27  | .29  |
| Rooft, Aconite, lb.       | .09  | .14  |
| Althea, cut, lb.          | .15  | .18  |
| Alkanet, lb.              | .08  | .07  |
| Arnica, lb.               | .18  | .13  |
| Belladonna Ger., lb.      | .08  | .12  |
| Blood, lb.                | .05  | .06  |
| Calamus, lb.              | .07  | .08  |
| Calamus, bleac'd, lb.     | .21  | .24  |
| Colchicum, per lb.        | .11  | .14  |
| Colombo, lb.              | .06  | .11  |
| Dandelion, Germ. lb.      | .07  | .08  |
| Dogwood, lb.              | .08  | .10  |
| Galangal, lb.             | .04  | .04  |
| Gentian, lb.              | .03  | .04  |
| Ginseng, lb.              | 2.50 | 3.25 |
| Ginger, Jamaica,          |      |      |
| blec'd, lb.               | .16  | .17  |
| Ginger, Jamaica,          |      |      |
| unblec'd, lb.             | .14  | .16  |
| Golden Seal, lb.          | .21  | .22  |
| Hellebore, powd., lb.     | .07  | .08  |
| Ipecac, lb.               | 1.15 | 1.20 |
| Jalap, lb.                | .28  | .30  |
| Kava Kava, lb.            | .27  | .30  |
| Licorice, select, lb.     | .08  | .15  |
| Pc'd, lb.                 | .05  | .12  |
| Lovage, lb.               | .50  | .55  |
| Mandrake, lb.             | .03  | .04  |
| Orria, Florentine, lb.    | .20  | .25  |
| Orria, Verona.            | .10  | .14  |
| Pink, lb.                 | .24  | .30  |
| Rhubarb, whole, lb.       | .25  | .60  |
| Sarsaparilla, Hond, lb.   | .28  | .44  |
| Sarsaparilla, Mex., lb.   | .09  | .10  |
| Senega, lb.               | .45  | .47  |
| Serpentaria, lb.          | .20  | .22  |
| Valerian, Belgian, lb.    | .07  | .07  |
| German, lb.               | .10  | .12  |
| Saffron, Amn., lb.        | .32  | .35  |
| Spanish, Valencia, lb.    | 6.50 | 7.00 |
| Spanish, Alicante, lb.    | 5.00 | 5.50 |
| Sal Ammoniac, lump, lb.   | .08  | .08  |
| Do. Granulated, lb.       | .05  | .09  |
| Sal Soda, Bag., 100 lb.   | 1.00 | 1.05 |
| American.                 | .90  | .95  |
| Saltpeter, crude, per lb. | .03  | .04  |
| Saltpeter, Refined, per   |      |      |
| lb.                       | .06  | .08  |
| Seeds, Anise, Ital., lb.  | .10  | .11  |
| Anise, German, lb.        | .06  | .06  |
| Anise, Star, lb.          | .28  | .23  |
| Canary, Smyrna, lb.       | .02  | .04  |
| Canary, Sicily, lb.       | .00  | .04  |
| Caraway, lb.              | .06  | .07  |
| Celery, lb.               | .12  | .12  |

|                             |          |         |
|-----------------------------|----------|---------|
| Cardamon, Aleppo,           |          |         |
| per lb.....                 | .65      | .75     |
| Cardamon, Malabar,          |          |         |
| per lb.....                 | .75      | .85     |
| Colchicum, lb.....          | .12      | .14     |
| Coriander, lb.....          | .05      | .05 1/2 |
| Cummin, lb.....             | .11      | ..      |
| Fennel, Germ., lb.....      | ..       | .19     |
| Flax Meal, per lb.....      | ..       | .09     |
| Foenugreek, lb.....         | .06 1/2  | .07     |
| Hemp, Russian, lb.....      | .05 1/2  | ..      |
| Mustard, yel. Cal. lb.....  | .04 1/2  | .05     |
| Mustard, brown, Cal.        |          |         |
| lb.....                     | .02 1/2  | .04 1/2 |
| Poppy, per lb.....          | .09      | .10     |
| Quince, German, lb.....     | .45      | .50     |
| Rape, German, lb.....       | .05 1/2  | .05 1/2 |
| Rape, English, lb.....      | .05 1/2  | ..      |
| Soap, Castile, Mara,        |          |         |
| mottled, pure, lb.....      | .05      | .05 1/2 |
| White, lb.....              | .20      | .20 1/2 |
| Soda Ash, lb., 48 per       |          |         |
| 100 lb.....                 | 1.50     | 1.20    |
| Squills, white, lb.....     | .04 1/2  | .04     |
| Sugar Milk, powd., lb.....  | .11      | .14     |
| Sugar Lead, white, lb.....  | .11      | .11 1/2 |
| Lead, brown, lb.....        | .05 1/2  | .06     |
| Sulphate Ammonia, per       |          |         |
| 100 lb.....                 | 2.90     | 3.90    |
| Do. Potash, 48 per          |          |         |
| lb.....                     | 1.25 1/2 | 1.25    |
| Do., Potash, 96 per         |          |         |
| lb.....                     | 2.20     | 2.25    |
| Sulphur, Roll.....          | ..       | .04 1/2 |
| Flour.....                  | ..       | .05 1/2 |
| Spirits Nitre, U. S. P..... | .39      | .40     |
| Spirit Ammonia, Arom.....   | .44      | .51 1/2 |
| Sulphuric Ether.....        | .54      | .54     |
| Sumac, Sicily, ton.....     | 43.00    | 47.00   |
| Virginia.....               | .43      | .45     |
| Tar Barbadoes, gal.....     | ..       | .45     |
| Tin Crystals, bbla., per    |          |         |
| lb.....                     | .25      | ..      |
| Jars, per lb.....           | .27      | ..      |
| Tonka Beans, Angost.,       |          |         |
| lb.....                     | 1.70     | 1.85    |
| Tonka Beans, Para, lb.....  | .90      | .60     |
| Angostura                   | 1.70     | 1.85    |
| Turpentine, Spirits.....    | .30 1/2  | .31     |
| Vanilla Beans, lb.....      | 6.00     | 13.00   |
| cut, lb., .....             | 4.75     | 6.00    |
| Venice Turpentine, bar-     |          |         |
| rels, lb.....               | .18      | .29     |
| Cans, lb.....               | .16      | .00     |
| Wax, Brazil, Veg., lb.....  | .11      | .19     |
| Japan, lb.....              | .08 1/2  | ..      |
| Zinc Oxide.....             | .20      | .18     |

# American Druggist and Pharmaceutical Record.

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THE subject of chemical nomenclature is attracting much attention just now, the note by Prof. JOHN ATTFIELD in a recent issue of this journal having aroused the interest of many scholars on the subject. It is with pleasure, therefore, that we lay before our readers elsewhere in this issue the views of the leading pharmaceutical philologists of this country. From these notes it will be seen that the attitude taken as to chemical nomenclature in the new edition of the U. S. Pharmacopœia is a well-considered and defensible one.

## THE TABLET-TRITURATE INDUSTRY.

THE announcement of the consolidation of two well-known firms of tablet triturate manufacturers in this city, together with the rumor that there is a probability of still another concern engaging in the manufacture of triturate and compressed tablets on their own account, serves to direct attention anew to a cause of much dissatisfaction among retail pharmacists.

We refer to the increasing use by physicians of medicines in the tablet form and the corresponding diminution of the prescription dispensing business of pharmacists which has followed as an apparently natural consequence. That the dissatisfaction does not spring wholly from motives of pecuniary loss or gain, and is prompted largely by the natural regard of the pharmacist for the maintenance of his reputation as a purveyor of *definite* medicinals, has been evinced in

many ways; but never so signally, perhaps, as by the action of the King's County Pharmaceutical Society (Brooklyn), at their meeting held on the evening of Tuesday, November 14, when a committee was appointed to examine and report upon the triturate and compressed tablets of the market, with especial reference to relation of contents to label as well as to the stability of certain drugs put up in this form. The gentlemen appointed on this committee are JOHN PFAIFFER and W. J. HACKETT, and as they are both skilled pharmaceutical chemists an interesting report may be looked for.

## AN OLD FRIEND WITH A NEW FACE.

MOST physicians and a good many pharmacists become impressed at different periods of their respective careers with the possibilities of pecuniary advantage that are supposed to lie in the formation of pharmaceutical companies. However, as these ideas seldom pass beyond the visionary stage, little harm is done.

In Brooklyn there is a concern known as the "Physicians' and Surgeons' Pharmaceutical Company," which proposes to make a specialty of prescription dispensing. The board of directors of the new company is said to be made up of physicians and pharmacists, one of the leading spirits in the new organization being, according to report, an ex-professor of pharmacy. While former concerns of this kind have restricted their operations to "the manufacture of reliable chemical and pharmaceutical preparations," with the avowed object of affording "physicians an opportunity of sharing in the legitimate profits of the manufacture by becoming stockholders of the company," the one we have reference to proposes to confine its attention to prescription work only, and has made preparations to start an extensive pharmaceutical establishment where the prescriptions of the members can be compounded and the profits accruing therefrom be divided among themselves. To the retail drug trade of Brooklyn this will indeed be a blow—but not perhaps in the sense anticipated by the promoters of the new scheme. Its first effect will probably be to prejudice people against the physicians who may connect themselves with the new enterprise, and this will be strengthened by the natural dislike of the individual for monopolies and combinations of any kind.

## REVISION OF THE TARIFF.

THE leading topic of the hour in commercial circles is the probable change in the tariff. The hysterical maunderings of CHARLES ACATALEPTIC DANA in the *New York Sun* over the free trade bill, which as a "portion of the party platform must be passed at once," carry no weight with them. The reports so far made as to the plans of the Ways and Means Committee indicate that the necessity of providing an increased revenue is to be kept steadily in view.

The wool, iron and coal trades will of necessity be very materially affected, as the dominant party is practically pledged to free raw materials, and the bounty on sugar will also no doubt be repealed. The schedule of changes to be made in import duties, so far as discussed, embraces nothing that will very materially affect the drug and chemical trades. The classifications of some lines of druggists' fine chemicals will very likely be changed, thus bringing them in at a somewhat lower rate, but the changes recommended will be more in the line of simplification of the schedules than of radical alterations in the rates.

There is in the minds of our legislators at Washington a good deal of that respect for "Schedule A," (embracing chemicals) which is born of ignorance. Experience has taught them that "Schedule A" is a dangerous thing to handle. We understand, however, that Chairman WILSON of the present Ways and Means Committee has the advantage of some experience in, and knowledge of pharmacy, and this knowledge will, no doubt, be of value in preventing the committee from committing any of those ludicrous blunders which have occasionally crept into the tariff legislation.

Neither importers nor manufacturers of drugs and chemicals have so far evinced any active interest in the proposed changes, though a few have been consulted by ex-Secretary Fairchild.

The most vital point at stake for the drug trade is that of the tax on alcohol. In the face of a large deficit, the Ways and Means Committee have been casting about for some method of increasing the income of the government. The increase of the tax on alcohol was agitated last year, and, as will be recalled by our readers, we took pains to point out at the time the great injustice which such an increase would work, and also how the existing stocks of alcohol would be so manipulated that practically every dollar of the increase would go into the pockets of the whisky trust and dealers, and not into the coffers of the government. Notwithstanding this it is proposed to advance the tax from 90 cents to \$1 per proof gallon. An increase on fermented liquors and on tobacco will probably also be made.

It is of the greatest importance to the drug trade and also to many lines of manufactures that if any change be made in the tax on alcohol such change be toward a lower rate of taxation, for while alcoholic liquors are luxuries when used as beverages, alcohol when used in the manufactures—and the bulk of it is

used for medicine and for manufacturing purposes—is simply a crude material of prime importance which we are unfortunately as yet unable to find a satisfactory substitute for.

Whether the income tax on which it is proposed to depend for an increased revenue is the best thing for the country at large may be open to question. But a tax which affects no income below \$4,000—and that is the figure contemplated—would probably affect but a small proportion of the retail druggists of the United States.

## PROFITABLE ENTERTAINMENT AT PHARMACEUTICAL MEETINGS.

THIS is the season of the year when active officers of pharmaceutical associations begin to consider ways and means of making coming annual meetings the successful affairs that all pharmaceutical meetings should be.

The social features of any gathering of individuals held in vacation time or under favorable conditions as regards season of the year and weather are yet regarded as of first importance by most organized bodies of American pharmacists. Many of the members of the different associations would like to see pharmaceutical science made more of a feature of the annual meetings. It is urged, however, by a few clear-minded individuals that this wished for blending of science with entertainment is not likely to be best obtained by a too free contribution of papers relating to subjects of technical interest only. As viewed by some members, the plan which appears to give the greatest promise of success is that which provides for particular and fitting mention of the newer additions to materia medica, either in the form of an annual report drawn up by a committee appointed specially for this purpose, or by an exhibition of samples of the drugs and chemicals introduced during the year.

The New York Pharmaceutical Association has a Committee on New Remedies, the outcome, we believe, of a motion made by C. H. SAGER when he was president of the association in 1888. In outlining the scope of the proposed committee he suggested that its duties should be to prepare a report on the additions to the materia medica during the year; and he also proposed that samples and specimens of these new remedies be placed on exhibition at the annual meetings of the association. Following this recommendation a committee was appointed composed of DR. ROBERT G. ECCLES, WILLIAM ANGELL VIAL and CHARLES K. BROWN, and their "Report on New Remedies," for 1890, has come in for well merited praise and is still used as a reference guide by members of the association. The committee for this year is composed of JAMES HUTCHENS, DR. GRAY and CHAS. F. SCHLEUSSNER.

The example of the Empire State Pharmaceutical Association is a good one and should be followed freely by other associations not already committed to this plan of arousing increased interest among their members.

The compiling of a report of this kind, in which the interest might be heightened by an exhibit of the different products (the latter to be held in one of the rooms of the meeting-place), would be a matter of the simplest kind, as the various American manufacturing chemists and representatives of foreign manufacturing chemists would doubtless be glad to have the privilege of co-operating and contributing, and samples of the newer remedies for exhibition purposes could probably be had for the asking.

### ENDOWMENTS FOR PHARMACEUTICAL EDUCATION.

SOME years since, when the plans for the establishment of the Leland Stanford University were first made public, the writer urged upon the late Senator STANFORD the claims which pharmacy had to recognition in the organization of just such a school as was contemplated at Palo Alto. The central idea of the university as then announced was to fit its students for the active struggle which follows on entering into one's life-calling; therefore it was urged the establishment of a course in pharmacy would be directly in line with the general aims of the institution. In laying these claims before the Senator the general status of American pharmaceutical education was outlined and the desirability of encouraging advanced studies in pharmacy was pointed out.

While non-committal as to the possibility of adding a pharmaceutical department later on, Senator STANFORD stated that the plans already adopted for the institution would require for their execution all of the funds at that time at the disposition of the university.

The matter is now called to mind by a suggestion in a contemporary that the Leland Stanford University is in a position to establish a model school of pharmacy independent of pecuniary considerations.

In view of the circumstances noted above it seems hardly probable that the university will at least in the near future engage in the teaching of pharmacy, but the occasion serves to again direct attention to the fact that pharmaceutical education has been carried on solely by pharmacists themselves and without any of those endowments which have been so richly bestowed upon literary, medical and other scientific schools.

There are those who believe that the cause of pharmaceutical education is better off without pecuniary aid from extraneous sources, who contend that the acceptance of such aid would weaken instead of strengthen the cause, and who point to one or two endowed universities whose departments of pharmacy have played but a minor rôle in the field of education.

In response to these critics we would say that the comparative failure in the few cases mentioned are attributable to causes outside of and entirely independent of the mere matter of endowment.

In one most notable instance, that of the pharmacy department of Cornell University, the failure arose from the incapacity of the university authorities to

comprehend the importance attached to the practical side of the pharmacists' studies and from a petty jealousy on the part of the controlling element of the alumni of the institution, who were opposed to recognizing the graduates of the pharmaceutical department as alumni of the university.

The career of the School of Pharmacy of the University of Michigan is as distinguished a success as the Cornell school was a notable failure, and we thus learn that State or endowed university aid is not incompatible with the success of the school of pharmacy.

The greatest good to the cause of advanced pharmaceutical education, however, is not to be had from the establishment of new schools, but from the improvement, both material and intellectual, of those now in existence. Dependent for their support upon the students' fees as are the larger schools, a marked deference must be paid to the wishes of the students in the adjusting of the curriculum. This deference is none the less real for not being readily apparent. There is an earnest desire upon the part of the teachers in these schools to elevate the grade of requirements for graduation, and to widen and deepen the attainments of their pupils, and this desire has made itself practically manifest within the past decade, as can readily be noted by comparing the character, the amount of instruction given, and the requirements for graduation now, with what they were ten years since.

This elevation has merely kept pace with public sentiment among pharmacists. It has followed rather than led that sentiment. Any too sudden forward step on the part of one of these independent colleges would have proven almost fatal, cutting off the students and fees necessary to the conduct of the school. It is true that this enforced conservatism has not been without its advantages, for it has built up the schools on a solid basis and has kept them in intimate touch with the practical side of pharmacy. So far, however, the pecuniary condition of these independent colleges has made it impossible for them to render that substantial aid to advanced study which is offered; for instance, by the scholarships and teaching fellowships of the Johns Hopkins University.

The lack of this aid drives aspiring American students abroad every year. With the governmental support of the university schools and with cheap living possible in Germany, an advanced student can go to Berlin, Bonn, Weisbaden or Göttingen and pursue his studies to better advantage and more economically than he can in the United States.

What is really needed is the establishment in each of the leading independent colleges of three-year post-graduate scholarships having incomes of four or five hundred dollars attached thereto.

Here is an opportunity for the educational philanthropist. There is no field of science more closely concerned with the conservation of the material welfare of the race than is pharmacy, and by aiding in the higher education of pharmacists additional safeguards will be thrown around the health of the entire community.

### CHEMICAL NOMENCLATURE OF THE NEW U. S. PHARMACOPŒIA.

In the issue of October 26 we published a brief note from Prof. John Attfield, reporter on the pharmacopœia to the British Medical Council, in which attention is called to the incongruity of the chemical nomenclature of the new U. S. Pharmacopœia in having the Latin title and the English synonym in different cases, as, for instance, *Magnesi sulphas*, magnesium sulphate, instead of a translation of the Latin, which would be "sulphate of magnesium." Professor Attfield holds that, if it be considered advisable to follow the newer methods of nomenclature, this could be done by following the example of the Germans, who put both Latin and German in the same case, saying *Magnesium sulphuricum*, magnesium sulphate.

The matter having been called to their attention, several of the leading pharmaceutical chemists of this country have favored us with their views upon the subject, and these views we present below.

#### A DIFFERENCE AS TO GRAMMATICAL CONSTRUCTION.

You ask me to express my views regarding the point raised by Professor Attfield in the letter which you sent me for perusal previous to its publication, but part of the contents of which were already known to me from a letter addressed to me personally by Professor Attfield. In complying with your request, I wish it to be understood that I give only my personal views, irrespective of those of other members of the Committee of Revision.

Professor Attfield is of the opinion that the English titles of chemical salts should be exact grammatical equivalents of the Latin ones. Thus, that "*Magnesi Sulphas*" should be rendered in English by "sulphate of magnesium," the Latin genitive "*Magnesi*" being expressed by the English genitive "of magnesium." Further, it appears that he regards the English term "magnesium sulphate" as grammatically equivalent to the German-Latin "*Magnesium sulphuricum*." I hold a somewhat different opinion. In my judgment the word "magnesium" in the term "magnesium sulphate" has the function of an adjective and is equivalent to "magnesian," consequently the true equivalent in Latin of "magnesium sulphate" (or "magnesian sulphate") seems to me to be "*Magnesian Sulphas*," in which the basylous constituent appears as an adjective, and not "*Magnesium sulphuricum*," where the base appears as a noun. But aside from this, even if it be conceded that "magnesium sulphate" is not an exact literal translation of "*Magnesi Sulphas*," it must be regarded as an advantage to have the Latin and English titles coincide so closely in most cases. This coincidence is most striking when these titles are abbreviated. Moreover, the new English nomenclature ("sodium bromide," etc., instead of "bromide of sodium") brings all the salts of a base together under the name of that base, while the old method ("bromide of sodium," instead of "sodium bromide") scatters them through the names of the different acids, or halogens, etc., unless the terms are inverted on purpose ("sodium, bromide of," etc.).

It is scarcely to be expected that physicians in this country will, in the near future, prescribe medicines by their English instead of by their Latin names. There are several strong reasons for retaining the Latin language to designate the ingredients of a prescription, and these reasons are so well known that they need not be mentioned here. But if the Latin is continued to be used for this purpose, it is highly ad-

visable to make as few changes in it as possible because physicians are loath to change the nomenclature to which they have become accustomed. For this reason any effort to approximate the names of chemical substances to modern scientific theories should rather be confined to the English titles, though, of course, the Latin ones are not likely to escape altogether, and no harm will be done, if, in this manner, the strict grammatical correlation of the English and Latin titles is somewhat disturbed. On the one hand, the Latin title will take account of the conservative tendencies of the writers of prescriptions; and on the other hand, the English title will bear the imprint of the progress of science. Truly, as Professor Attfield says, the English equivalent will, in many cases, be a compromise. But there need be no objection to this, so long as the term is clear, precise, and not likely to be misunderstood.

CHARLES RICE.

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### LATIN THE UNIVERSAL LANGUAGE OF SCIENTIFIC NOMENCLATURE.

The Pharmacopœia Committee, in my estimation, has pursued the only and best course in the rendering of the English titles of the monographs. I do not favor a too literal translation of the Latin headings, for in such instances as above, they prove very cumbersome and impracticable. The English terms should correspond to the modern chemical nomenclature as nearly as possible. Prof. Attfield is evidently mistaken if he understands this to be preliminary to the abandonment of Latin nomenclature. Such a step would be absolutely ridiculous; just imagine the Pharmacopœia title "Gum Tragacanth"—synonym "devil's toe nails."

Latin has always been the universal language in scientific nomenclature, not only because it is intelligible to every nation, but being a dead language is not subject to the variation and changes peculiar to modern tongues; this is particularly the case with English. To illustrate this, I understand that one of the graduating classes of medical students in Baltimore adopted a resolution in which it was agreed to employ English terms only, in writing prescriptions. Now let us suppose that one of the class would prescribe, for example, fluid extract of snake root, what would the apothecary dispense? He would have to take his choice between Virginia snake root (*Aristolochia serpentaria*) black cohosh (*Cimicifuga racemosa*), seneca root (*Polygala senega*), button snake root (*Eryngium aquaticum*), or Canada snake root (*Asarum canadense*). This would all depend in what part of the country the physician might reside; then in such a case it would be advisable to state the residence of the prescriber, so that the doubt might be lightened.

Again say he prescribed fluid extract of Indian hemp, then it would remain for the apothecary to inquire of the patient and ascertain whether he required the *Apocynum Cannabium* as a diuretic and diaphoretic, or the *Cannibis Indica*, a narcotic—all this for the sake of a prescriber who is too lazy to learn a few Latin terms.

Let him prescribe corrosive sublimate and then witness the consternation of the patient, when on reading the prescription, he learns that he is being treated with bed-bug poison. Popular prejudice will soon deprive the framers of such resolutions as the above of what practice they may have gained. Upon the whole the idea of the abandonment of Latin in pharmaceutical nomenclature is too absurd to demand any further consideration.

VIRGIL COBLENTZ

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SIMPLY AN EXTENSION OF A LONG CONTINUED AND WELL ESTABLISHED PRECEDENT.

In the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD of October 26, 1893, on page 238, appears a note by Prof. John Attfield, criticising the nomenclature of chemical compounds in the United States Pharmacopœia as follows:

"The English rendering—I cannot call it translation—of the title has been turned around so as to harmonize with the practice of the majority of modern chemical authors. Thus, for example, it is no longer sulphate of magnesium, but magnesium sulphate. From the literary point of view it is awkward, if not solecistical, for the Latin heading to express one name, and the English immediately underneath it to express another name; nevertheless I think that the compilers were wise, as well as politic, in making what the majority of mankind so dearly love—a compromise. They might have continued to give such names as *Magnesii Sulphas*, sulphate of magnesium or with the Germans, have given *Magnesium Sulphuricum*, magnesium sulphate. They have steered a middle course preliminary, doubtless, to an abandonment of the Latin channel altogether."

The change in nomenclature adopted by the Committee of Revision of the U. S. P., as described in the preface to that work, consists "in the designation of chemical compounds (oxides, salts, etc.), in which it is now customary to put the basylous or metallic component first, viz., sodium chloride, silver nitrate, lithium bromide, lead oxide, etc., instead of writing chloride of sodium, nitrate of silver, bromide of lithium, oxide of lead, etc."

The abandonment of the Latin nomenclature probably never entered the mind of any member of the Committee of Revision in making this change, such change having been made doubtless with the sole view of being in accord with the nomenclature adopted by modern chemists and chemical authors; such an abandonment would no doubt be looked upon as a great misfortune by the great majority of educated physicians and pharmacists.

In thus changing the English names, the basylous or metallic component of the name has been used as an adjective instead of a noun, and this is in strict accordance with English usage; thus we say a silver plate, a copper wire, an iron nail, etc., much more frequently than we say a plate of silver, a wire of copper, a nail of iron. Why then should we not say "a silver nitrate" instead of "a nitrate of silver," or "a copper sulphate," or "an iron oxide," instead of "a sulphate of copper," or "an oxide of iron"?

Moreover we find that this custom has always prevailed, not only in the U. S. P. but also in the British Pharmacopœia. Thus in the U. S. P. we find all the "*Aquæ*" are translated in this way—that is, by using the adjective form—and in this last revision, "water of ammonia" has been changed to "ammonia water"—thus making it correspond with all the rest. So with all the cerates, excepting "*Ceratum plumbi subacetatis*," in which the genitive case in English is used, it being translated "cerate of lead subacetate."

The same use of the adjective translation appears in all the "*Chartæ*;" in all the "*Emplastra*;" in all the "*Linimenta*" but two; in two of the "*Misturæ*;" in several of the "*Olea*;" and in 11 out of 23 "*Unguenta*."

In the British Pharmacopœia we find that this adjective translation is used in all the "Roots," "Fruits," "Leaves," "Flowers," "Barks," and "Seeds;" as well as in all the "Pulps," "Plasters," "Poultices," "Suppositories," "Troches," and "Waters." In all of these I believe there is no exception.

Thus we see that this use is simply an extension of a long continued and well established precedent.

If it should be deemed advisable to change the Latin chemical names to correspond with the English names as adopted, it might very readily be accomplished by giving an adjective termination to each elementary substance; thus we might say "*Chloridum Sodicum*," "sodium chloride;" "*Nitras Argenticus*," "silver nitrate;" "*Bromidum Lithicum*," "lithium bromide," etc.

If such names were adopted when there were two or more salts having the same base, the difference should be shown by prefixes to the acidulous component, and not to the basylous or metallic one, and this system should be followed in the English as well as in the Latin names; thus, we might say, "*Sulphas Ferricus*," ferrum sulphate or iron sulphate; "*Disulphas Ferricus*," ferrum disulphate or iron disulphate, and not as at present—ferrous sulphate and ferric sulphate.

The name "*Balsamum Peruvianum*" and "*Balsamum Tolutanum*" are not translated correctly. The English names should be "Peruvian," or better "Peru balsam" and "tolu balsam;" Peruvianum and toltutanum being adjectives. Both of these substances have been official in every U. S. P., commencing in 1820. Peru balsam had the Latin name "*Myroxylon*" in the pharmacopœias of 1820, 1830 and 1840; while tolu balsam was called "*Tolutanum*" in 1820 and 1830, with the English name "tolu." In 1840, although the Latin name "*Tolutanum*" was retained, it was called in English "balsam of tolu." In 1850 both names were changed, and since this date they have been called respectively, "*Balsamum Peruvianum*" and "*Balsamum Tolutanum*," with the English names "balsam of Peru" and "balsam of tolu." These Latin names were doubtless given in order to make a correspondence between the two. In the case of "*Balsamum Tolutanum*" the word *Balsamum* should be left off, thus restoring the old name "*Tolutanum*" with the English "tolu." In fact these names only are now used in the preparations of these substances; thus we say "*Syrupus Tolutanus*," "syrup of tolu," and "*Tinctura Tolutana*," "tincture of tolu," the word balsam being entirely omitted both in English and Latin.

ALBERT B. TAYLOR.

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#### THE ENGLISH A SYNONYM FOR, NOT A TRANSLATION OF THE LATIN.

So far as I am aware the change of the English titles in the new U. S. Pharmacopœia was not in any way influenced by a desire to abandon or even discredit the Latin. The intent was to have these titles in harmony with the nomenclature of progressive chemists. We could not adopt all the innovations proposed, but this one having decided advantages was accepted. "Mercuric chloride" is shorter and its meaning more distinct than "chloride of mercury." "*Magnesii sulphas*" might have been changed to "*magnesium sulphuricum*," so as to have had our English appear as is translated from the Latin, but this was not the intent. The two stand as independent now as if the English had been "Epsom Salts." The first is the Latin name as adopted by many pharmacopœias in common with our own. The second is the American-English name for the same article.

There is no compromise. It is not intended as a translation. The Latin name is maintained for the benefit of medical men who wish to prescribe in Latin, as a hereditary mark of the original Latin pharmacopœia from which ours descended, as an aid to foreigners who wish to consult our book, as a ready means of discovering the contents alphabetically because of the Latin habit fixed upon us in the past and as a protection to the traveling public who are having prescriptions compounded by country pharmacists who know no Latin but are guided to the article by their pharmacopœia.

Had any translating been done the proper course would have been to translate the English into Latin and made that the Latin title. Then, however, our Latin would have disagreed with that of our British

cousins and no end of confusion have arisen by the change of case. Latin titles may ultimately be abandoned altogether as suggested by the professor, but for the reasons above given as well as from the fact that the ancient is the ornamental of the present my protest would go against any act so radical. R. G. ECCLES.

#### A COMPROMISE.

The subject of pharmacopœial nomenclature is only in its formative stages. Like similar attempts to construct specific language for established sciences, it must be a constant compromise between a definite terminology and such changes as the practical application or acceptance of its development may admit of. Unlike the newer branches, electricity, bacteriology, etc., chemical terms must grow slowly and deliberately in order to avoid confusion.

There is no especial necessity for the English title to be a translation of the Latin title any more than that the English names should be translations of the titles, or that the synonyms should be derived from the names. The nomenclature must be constructed from changes in the common names upward.

First, a distinction should be made as follows:

|          |          |                         |
|----------|----------|-------------------------|
| Title,   | Latin,   | <i>Magnesi sulphas.</i> |
| Title,   | English, | Magnesium sulphate.     |
| Name,    | English, | Epsom salt.             |
| Synonym, |          | Bitter salt.            |

As to the suggestion that the Latin titles be abandoned in the pharmacopœia, that is a proposition too absurd for consideration. Our only hope for insuring something like uniformity in pharmacy as well as in all other sciences lies in the adoption of Latin or other dead languages in the construction of nomenclatures.

C. S. N. HALLBERG

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#### THE CHANGE AN IMPROVEMENT.

As a chemist, and above all a chemical teacher, interested in the general acceptance of exact chemical phraseology, according to modern views, I cannot but approve of the substitution of terms like "magnesium sulphate" for "sulphate of magnesia." The latter was a relic of the older chemical or dualistic views when the base magnesia was supposed a necessary prerequisite for the formation of a magnesium salt, when  $MgO$  and  $SO_3$  were supposed to unite to form the salt in question. With the clearer understanding of the distinction between the oxygen acids and their anhydrides, this view was given up for the present view of formation of oxygen salts by substitution, or replacement of the hydrogen of the acid by metal or basic radical. This view is moreover the one which allows us to explain the results of the electrolysis of metallic salts, whether fused or in aqueous solution, the most readily. So I approve of "magnesium sulphate."

Now as to the corresponding Latin term. If we are to have a Latin designation for such chemical salts as are official and hence subjects of discussion in the pharmacopœia, I would still prefer "*magnesi sulphas*" to "*magnesium sulphuricum*." The latter term is too ponderous and is unfamiliar to the ordinary practitioner in medicine and pharmacy, while the former has the advantage of being an old acquaintance. Again, while the literal translation of the present Latin term would give us "sulphate of magnesium," it would not give us "sulphate of magnesia," which is the old objectionable term of the older pharmacopœias. So I am not as disturbed as Prof. Atfield seems to be at the conjunction of terms in the new edition of the pharmacopœia.

As to the utility of retaining the Latin designation in the case of definite chemical salts of well defined character like magnesium sulphate, I suppose we must defer to the preferences of the doctors who write prescriptions and whose conservatism will not allow as yet of the laying bare of their directions to popular gaze by the use of English terms.

SAMUEL P. SADTLER.

Philadelphia College of Pharmacy.

#### A SYNONYM—NOT A TRANSLATION.

I agree with Professor Atfield, of course, that "Magnesium sulphate" is not a good translation of "*Magnesi sulphas*." I do not think the revisers of the U. S. P. intended it to be a literal translation, but rather a *proper synonym*. As a synonym I think it better than "sulphate of magnesium" would be. Synonyms need not be literal translations of official titles.

It may be correct to say that from a "literary point of view this rendering of chemical synonyms is awkward if not solecistical," but I do not think scientists will severely criticise a work like the U. S. P. from a literary standpoint any more than a literary man would severely criticise a literary work from a scientific standpoint.

The German method "*Magnesium sulphuricum*" has many advantages not least among which is the matter of indexing. I shall not have time to enlarge upon this.

As to the abandonment of Latin altogether, I do not think the tendency is that way. Our pharmaceutical titles as a whole would suffer, and, in my opinion, if Latin were to be abandoned, confusion would be inevitable.

L. E. SAYRE.

University of Kansas.

#### Toxins and Antitoxins.

It is stated by Dr. Kanthack, in the *Medical Chronicle*, that the specific action of pathogenic bacteria has been shown, during the past few years, to be due to toxalbumins instead of ptomaines or poisonous bases, as was formerly supposed, and it was assumed that these toxalbumins were formed from albuminous substances existing in the body as a result of the activity of bacteria. They are considered by Buchner (*Münch. med. Wochen*), however, to be direct products of bacterial cells, and he has proved this in the case of tetanus, by growing the bacillus on a solution of asparagin. Since asparagin cultures produced the typical, tetanic lesion in animals, it seemed clear that the toxalbumin formed must have been derived directly from the bacterial plasma. Though no toxalbumins have yet been separated in a pure state, they are known to react like the enzymes and so-called alexins or protective proteids. In a moist condition, they are generally destroyed by a temperature of  $55^{\circ}C.$  to  $70^{\circ}C.$ , though resisting much higher temperatures when in a dry state, while neutral salts, such as the sulphates of alkaline bases, which limit the action of water, will also increase the resistance. Buchner further suggests that antitoxins, as well as toxins, are probably bacterial products. Antitoxins act by establishing in animals immunity to specific diseases. They appear to remain stored up in the organism after the toxins have been rendered harmless, even when administered in the exact proportion to effect neutralization of the latter. Probably, therefore, toxins and antitoxins do not react directly on each other, and the latter, acting by immunization, have no direct curative action.

(Written for the American Druggist and Pharmaceutical Record.)

## WINTER SPECIALTIES.

By ELBERT E. FISHER, PH.G.

Winter medicines are now in order, and the pharmacist who aims to keep abreast of the times and is enterprising is busying himself at the moment in bringing the specialties of his own make to the front.

While no attempt will be made in this article to bring forward a *complete* list of the medicines popular at this season, mention will be made of the cough syrups, cod liver oil compounds (including the wine), and the stimulating preparations of wine and coca, in popular demand.

Cough mixtures naturally demand first attention and the formulas given below will be found to afford really good and tried mixtures which can be disposed of at a profit.

## WIGGINS' SPRUCE GUM SYRUP

is a name which can be applied to a syrup of spruce gum which is much called for in some localities and is prepared as follows:

|                                 |          |
|---------------------------------|----------|
| Tincture of red spruce gum..... | ℥. 5ij   |
| Sugar.....                      | ℥. xviiv |
| Water.....                      | ℥. i     |
| Caramel.....                    | ℥. i     |
| Fuller's earth.....             | ℥. ii    |

Mix two ounces of the sugar with the tincture of spruce and Fuller's earth, rub well and add the water in divided portions; then filter, returning the filtrate until it comes through clear; add the caramel and sugar, which dissolve with a gentle heat, and strain while warm.

A syrup of a different and richer appearance may be made by mixing equal parts of the syrup prepared as above and syrup of wild cherry of the U. S. Pharmacopœia.

## TINCTURE RED SPRUCE GUM.

This tincture is best prepared according to the following formula:

|                                      |        |
|--------------------------------------|--------|
| Red spruce gum (in fine powder)..... | ℥. 5ij |
| Alcohol, q. s.....                   | ℥. i   |

Macerate until dissolved and filter.

## CHLORODYNE OR PULMONIC SYRUP.

This furnishes a most efficient compound and is prepared as follows:

|                                  |         |
|----------------------------------|---------|
| Tincture of cannabis indica..... | ℥. 5iii |
| Tincture of tolu.....            | ℥. 5iii |
| Oil of peppermint.....           | ℥. 5i   |
| Morphine sulphate.....           | ℥. 5i   |
| Chloroform.....                  | ℥. 5iv  |
| Fluid extract of lobelia.....    | ℥. 5i   |
| Water.....                       | ℥. 5iv  |
| Syrup, q. s. ad.....             | ℥. 0v   |

Mix the tinctures of tolu and cannabis indica with the chloroform and oil of peppermint, dissolve the morphine in the water, add this solution to the foregoing, shake thoroughly, and lastly add the syrup.

This furnishes a greenish-opalescent syrup of a pleasant flavor which finds many favorites. The syrup may be bottled in two and one-half or three ounce panels to be sold for 25 cents. The total cost to the maker, including bottle, cork, medicine and label is about 10 cents.

Many people like a cough mixture containing oil and having the appearance of an emulsion. The formula given below will produce an almond oil emulsion which is already prepared for sale by many druggists.

## HYATT'S EMULSION FOR COUGHS, ETC.

|                       |        |
|-----------------------|--------|
| Sweet almond oil..... | ℥. 5ii |
| Syrup of acacia.....  | ℥. 5x  |

## M. ft. emulsio et adde

|                              |        |
|------------------------------|--------|
| Chloroform.....              | ℥. 5ii |
| Morphine sulphate.....       | gr. iv |
| Syrup of tolu, q. s. ad..... | ℥. i   |

Mix thoroughly.

This can be put up in the same way as the chlorodyne compound, or for a change may be sent out in four ounce panels and sold for 35 cents, which affords even a larger profit than the preceding preparation.

## LINSEED COUGH MIXTURE.

Linseed oil is very often prescribed by physicians in the treatment of pertussis and colds, and a mixture prepared according to the formula given below is deemed by many to be of particular value:

|                               |          |
|-------------------------------|----------|
| Linseed oil.....              | ℥. 5iv   |
| Powdered acacia.....          | ℥. 5iv   |
| Mucilage of Irish moss.....   | ℥. 5ii   |
| Syrup.....                    | ℥. 5iiss |
| Glycerin.....                 | ℥. 5i    |
| Oil of cassia.....            | ℥. 5i    |
| Oil of wintergreen.....       | ℥. 5i    |
| Oil of sassafras.....         | ℥. 5i    |
| Chloral hydrate.....          | ℥. 5iv   |
| Diluted hydrocyanic acid..... | ℥. 5iiss |
| Morphine sulphate.....        | gr. ii   |
| Water, q. s. ad.....          | ℥. i     |

## M. ft. emulsio.

Any number of cough mixtures may be made from the above type, and no fear may be entertained that they will not afford satisfaction.

## CHERRY COUGH SYRUP.

This is an agreeable and pleasant syrup composed of:

|                                 |        |
|---------------------------------|--------|
| Syrup of squill.....            | ℥. 0i  |
| Tincture of blood root.....     | ℥. 5vi |
| Tincture of opium.....          | ℥. 5iv |
| Ammonium chloride.....          | ℥. 5i  |
| Syrup of wild cherry, q. s..... | ℥. i   |

It is a profitable idea to expose for sale on the glass show case syrup of hypophosphites in bottles of distinctive design; for while many people have no elevated idea as to its value the fact remains that there are others who pin their faith to it. Many mothers want it for their children, and it has the advantage over other syrups in not having a bitter taste. The writer would recommend a smaller size than is usually placed by wholesalers to be put up in connection with the larger size retailing at \$1.00. A six-ounce bottle to sell at 50 cents, when put up by the retailer, affords a fair margin of profit. A full pint for a dollar is always a good drawing card with the public, as it compares to advantage alongside of the twelve ounce package of the large dealer. For a syrup hypophosphites the U. S. P. formula is advised, though coloring substances may be added at the discretion of the maker. For the latter purpose hydrastis, eucalyptol, terebent, etc., may be used.

## COD LIVER OIL COMPOUNDS.

So many essays have appeared in the journals on the preparation of cod liver oil emulsions that it is presumed every druggist has a recipe of his own. To those who do not manufacture their own emulsion of cod liver oil no better advice can be given than to begin at once. Its preparation is easy and there is much profit and satisfaction in selling a good preparation.

A "tasteless" compound of cod liver oil is something which is always in demand to more or less extent, and the formula which I bring forward, when rightly manipulated, furnishes a product which places it clear in the first rank of "tasteless" preparations of cod liver oil.

## ARTHUR'S PERFECTED PREPARATION OF COD LIVER OIL.

|                                   |         |
|-----------------------------------|---------|
| Fluid extract of wild cherry..... | ℥. 5ii  |
| Fluid extract of licorice.....    | ℥. 5iii |
| Glycerin.....                     | ℥. 5i   |
| Syrup.....                        | ℥. 5i   |
| Liquid extract of malt.....       | ℥. 5vi  |
| Syrup hypophosphites.....         | ℥. 5iii |
| Gadul.....                        | ℥. 5i   |
| Fuller's earth.....               | ℥. 5iv  |
| Caramel, q. s. as desired.....    | ℥. i    |

Mix the gaduol with the glycerin and rub with the Fuller's earth; then add the fluid extracts, syrup and malt, shake well, let stand one day, occasionally shaking and filtering. To the filtrate add the syrup hypophosphites and mix well.

Should the resulting product not quite come up to the expectations of the compounder a slight modification of the formula in regard to the quantities of some of the ingredients, such as the fluid extracts and glycerin, will result in a different appearing compound.

#### WINE OF COCA.

The Boston formula for this preparation is thought most highly of, and the formula given below will turn out a compound closely resembling it:

##### *Wine of Coca.*

|                            |         |
|----------------------------|---------|
| Port wine, { ss.....       | Oliv    |
| Claret wine, { ss.....     | xxii    |
| Sugar.....                 | xxxviii |
| Alcohol.....               | ii      |
| Fluid extract of coca..... | iss     |

Let stand two weeks and filter.

The addition of beef to a compound of this order is very highly esteemed in some quarters and is thought to afford a more nourishing and stimulating preparation. I would suggest a combination as follows:

##### *Wine of Coca with Beef.*

|                               |         |
|-------------------------------|---------|
| Liebig's extract of beef..... | 3 vi    |
| Wine of coca, q. s.....       | Cong. j |

Let stand about three days and filter.

Each fluid ounce of the above will represent about two-thirds of a fluid ounce of lean beef. This makes an elegant preparation which commends itself readily to buyers, presenting as it does in pleasant combination two well known articles of medicinal value.

#### WINE OF CODLIVER OIL.

Wine of codliver oil is having a run just now, and for its preparation I have found these formulas of excellent value. The formula given first contains the active principles of codliver oil as isolated by French chemists; it reads as follows:

##### *Wine of Codliver Oil.*

|                          |          |
|--------------------------|----------|
| Gaduol (Merck's).....    | gr. lxiv |
| Alcohol.....             | ℥. 3 iv  |
| Syrup.....               | ℥. 3 ii  |
| Fuller's earth.....      | 3 iv     |
| Port wine, q. s. ad..... | Ol       |

Mix the gaduol with the alcohol and add the Fuller's earth; rub well together, then add the syrup and wine. Let stand a day or so, shaking occasionally, then filter, passing sufficient wine through the filter to preserve the volume. If these directions are followed the product will be an elegant preparation, resembling but a little sweeter than other preparations of the same name.

A preparation of the same character but of a more distinctive taste and appearance may be compounded as follows:

##### *Tart Wine of Codliver Oil.*

|                                      |          |
|--------------------------------------|----------|
| Gaduol.....                          | gr. lxiv |
| Alcohol.....                         | ℥. 3 iv  |
| Fuller's earth.....                  | 3 iv     |
| Port wine, { ss p. e., q. s. ad..... | Ol       |
| Claret wine, { ss.....               |          |

Proceed as before.

Compounds prepared as above contain 25 per cent. of the active medicinal principles of codliver oil. The first is the pleasanter preparation of the two, but both are certain to give satisfaction.

(Written for the American Druggist and Pharmaceutical Record.)

## HOT SODA FLAVORS.

By THOMAS WARWICK.

The man who first invented hot soda water deserves a vote of thanks from the community in general and from the druggist in particular. In fact the prohibitionists should nominate him for president at the next election, for it is an undeniable fact that the craving for stimulants is greatest in the Winter time, and that the increase of hot soda drinking must necessarily diminish the demand for alcoholic liquors. Moreover, so far as solid comfort goes, when the thermometer is hiding below zero, no stimulant can equal a good nourishing mugful of "hot bouillon."

Yet hot soda water had a hard struggle to obtain a place at the dispensing counter. Although over thirty years on the market, it was almost unknown to the general public until a few years ago, when it first began to come into notice, and has been yearly growing in popularity ever since, so that nowadays it can be found in all large cities, and the fact that the hot soda trade may be made remunerative will be seen when I state that in Hudnut's pharmacy in New York city, the sales of hot soda on a cold Winter's day average about from 1,500 to 2,000 glasses, which represents quite a neat little daily profit.

The flavors in demand at the hot soda counter vary with the season. During the month of October, and again in the month of March, when the weather is relatively mild, hot chocolate and hot coffee are the favorite drinks, but as soon as the really cold weather sets in the demand for "bouillon" and for clam juice increases with astonishing rapidity. Hot chocolate, hot coffee and "bouillon" are the three great staples of the hot soda trade, and in fact at Huyler's counters, where the soda water sales are probably as great as in almost any other establishment in the United States, the hot soda drinks are confined almost exclusively to these three flavors.

What is still more curious is the fact that these three flavors are patronized almost equally by the men and the women. The only difference seems to be that the majority of ladies prefer chocolate to coffee, whereas the majority of men prefer coffee to chocolate. The reason seems to be that the coffee is not so much sweetened as the chocolate. Thus at Huyler's, where the customers are almost all ladies, much more hot chocolate is sold than coffee, while at Hegeman's and Hudnut's, where the customers are principally business men, the sales of hot coffee are by far the greatest.

While recognizing the great advantage of having only a few staple drinks in stock and keeping these of high quality, I nevertheless believe it wise to have a choice of flavors to offer customers.

Thus, in addition to the four drinks above mentioned, there is some demand for hot lemonade, hot tea, ginger, and the various milk and egg drinks.

Chicken broth has not the place which it deserves among hot soda flavors, for it should, in my opinion, be the most popular soda water flavor, and where a good article is furnished and is well pushed, I think the hot soda sales can be greatly increased.

#### HOT COFFEE.

Hot coffee being the most popular flavor must be treated of first. It is evident that ordinary coffee would be too weak for use in hot soda water, since the addition of the hot water from the draft arm would dilute it considerably. A strong extract of coffee is therefore required, and is usually obtained by passing steam through a percolator packed with ground coffee beans. The steam extracts all the strength and aroma

of the coffee, and then slowly condenses, forming a very strong coffee extract. Those who do only a small business will, of course, find it advantageous to buy their extract ready made, rather than make it themselves.

Some dispensers use only Java coffee for their hot soda, making their extract from what is technically known as the "male berry," but I confess that for my part I prefer a mixture of Java and Mocha. It is almost unnecessary to say that the coffee should be purchased in the bean and should be ground only at the very last moment. One pound of coffee beans will make sufficient extract to flavor about a gallon of simple syrup, since, as before remarked, hot coffee is not drawn so sweet as the coffee served up with cold soda. The extract may be either added to the simple syrup and so dispensed from the syrup tank of the apparatus, which is a great convenience for the soda-fountain boy; but the best dispensers prefer to keep the simple syrup and the coffee extract separate, not only because the two keep better that way, but because it is easier to regulate the sweetness of the drink to suit the taste of individual customers.

#### HOT CHOCOLATE.

This, as before mentioned, is the ladies' favorite Winter tippie. A very good formula for chocolate syrup for hot soda is to take one pound of essence of cocoa to one gallon of vanilla syrup of 25° strength by the saccharometer. The powdered cocoa should be stirred in until thoroughly incorporated, while the syrup is quite hot. The syrup as thus prepared will keep for several days in a cool place. Like all soda water flavors, however, it is well to make it up in small quantities so as to have it always perfectly fresh, hence small dispensers must reduce the quantities given, say, one-half or three quarters.

Some authorities recommend the addition of a little cornstarch or gelatin to the chocolate syrup to give it "body," but these additions will only spoil an otherwise palatable drink.

An essential point to bear in mind is that the chocolate used, or more properly speaking the cocoa, must be deprived of its butter, and this operation must be performed by what is known as the "cold process." Such cocoas as those furnished by Menier, Van Houten, Maillard, and almost all the Dutch firms, will answer the purpose admirably, these manufacturers all using the cold process. In ordinary cake chocolate the cocoa butter is left, but in chocolate for making soda water syrups it must be removed or the butter would separate and the chocolate become lumpy, and its keeping qualities would also be impaired. On the other hand, if the cocoa butter be removed by the hot process, the chocolate loses its flavor.

When serving up hot chocolate at the dispensing counter, the addition of a little whipped cream will greatly improve the taste and appearance of the drink. The whipped cream can be made by whipping together the whites of three eggs and one-half pound of powdered sugar to a stiff froth. The cream when whipped should be kept in a cool place, and a teaspoonful be added to each tumblerful of hot chocolate before serving.

#### BOUILLON.

Under this heading may be classed the various meat preparations, including not only beef broth and beef tea (so-called), but also the various meat juices, whether served up raw or cooked. There is a great demand for these drinks from November to February, and when properly made they are not only comforting at the moment but are most nutritious and palatable. Liebig's beef extract is the one generally preferred for

hot soda water purposes, as its keeping qualities seem somewhat better than those of most other brands. The extract need be merely dissolved in hot water, the proportions required being about four ounces of beef extract for a gallon of beef tea.

A very fine addition to beef tea, and indeed to all other beef preparations, is a small amount of Lea & Perrins' sauce. This gives a relish that is thoroughly appreciated by the customer. A little extract of celery or celery salt should also be added. The combination of these three ingredients makes a delicious beverage.

Beef juice is one of the beef preparations which on general principles can be highly recommended. Physicians are yearly growing to understand better the value of warm blood as a nourishing agent, and prescribe it continually for building up weak systems. Most patients, however, especially among the women, shrink from making a daily pilgrimage to the slaughter-houses for a glass of warm blood, and for these (and indeed for all weak persons) the freshly expressed beef juice is to be highly commended as being the next best thing to the warm blood. It is moreover exceedingly palatable when served up in the form of hot soda.

The beef juices on the market have usually undergone some little preparation or addition before they reach the druggist, and are generally known under some fancy name. Probably the best known of these beef juices is that which goes under the name of "Boviline." It is put up in barrels in Chicago, a small quantity of yolk of eggs and whisky being added to the fresh beef juice, and the mixture is then sent out to all parts of the country. The whisky is used merely as a preservative, and I must confess I hardly see what advantages it has over pure alcohol. The amount of whisky added is, however, so small, that it does not bring the preparation under the excise laws, which is an important point for druggists in many parts of the country, especially in those cities where the law prohibits druggists from selling any intoxicating liquors that are to be consumed on the premises.

#### HOT LEMONADE.

For making hot lemonade the freshly expressed lemon juice is greatly to be preferred to the extract of lemon, as it makes a much more satisfactory beverage in every respect. The only trouble is that the lemon juice does not keep well, and hence must be made up in small quantities and used at once. At Hudnut's pharmacy it is the practice to make fresh lemon juice three times each day in order to have it always fresh. Where the demand for it is small, the lemon can be squeezed into each tumblerful of soda served. The lemon juice may, of course, be either added to the simple syrup or may be dispensed separately, but in either case the following proportions are to be recommended, about ten ounces of lemon juice to each quart of simple syrup of 22° strength. Of course in all these formulas the proportions are only approximate, and must be altered to suit popular taste in the locality where the druggist happens to be established. People's tastes differ widely, and it requires some experimenting to fix upon a happy mean. It is needless to say that lemon syrup, nor in fact no other acid syrup, goes well with cream.

When egg drinks are sold, the egg is first broken into the mug and whisked around with any convenient egg beater, and the syrup and water are then drawn upon it.

In conclusion I cannot insist too strongly upon the importance of using only fresh flavors. Every flavor used should be made up fresh every morning, and lemon-juice should be prepared at least twice a day, if not oftener.

# Pharmaceutical Progress

**Eau Tremolieres and Ristoratore di Capelli** are two lead hair dyes.—*Pharm. Centralhalle.*

**Creme Lefebre** is a freckle lotion which (*Pharm. Central.*) is a yellow wax salve containing corrosive sublimate.

**Thompson's Pate des Gnomes**, a stimulant for the beard, consists of a rose-colored perfumed glycerin salve.—*Pharm. Centralhalle.*

**Thompson's Eau des Circassiennes** consists of 30 grammes of zinc oxide rubbed up with 200 grammes of perfumed water.—*Pharm. Centralhalle.*

**Piperine** is not tasteless, though we have been taught that it is, says Th. Wiegler (*Pharm. Zeit.*, 1893, 584), as can best be demonstrated by tasting a hot solution of it.

**Syrup of tolu** which has altered in color and taste from standing may be at least partially restored by boiling briskly for a few moments. According to M. Ausaldy (*L'Univ. Pharm.*) the addition of 0.05 centigrammes of benzoic acid to each liter of the freshly made syrup has preserved a sample unaltered for more than a year.

**Plane-tree Honey**.—E. Jandrier describes a sweetish exudation found during dry Summers on plane trees (*Platanus orientalis*). It varies considerably in appearance, being sometimes dry and brilliant, at others pasty and yellowish. Besides a small quantity of a reducing sugar, apparently glucose, it contains from 80 to 90 per cent. of mannite, which may be readily extracted by crystallization from boiling alcohol (*Comp. rend.*, cxvii., 498).—Through *Pharm. Jour.*

**Iridin**, a glucoside from orris root, has been isolated and investigated by G. DeLaire and Ferd. Tie-mann. The glucoside has the formula  $C_{24}H_{36}O_{11}$ , and its melting point is  $208^{\circ}C$ . (*Ber. d. D. Chem. Gesell.*, 26, 2010). At 80 to  $100^{\circ}C$ . the glucoside is split up by diluted sulphuric acid yielding glucose and "irigenin" (melting point  $186^{\circ}C$ .), thus  $C_{24}H_{36}O_{11} + H_2O = C_6H_{12}O_6 + C_{18}H_{24}O_5$ . They further obtained from irigenin an aromatic oxyacid which they term "iridinic" acid; a phenol, "iretol."

**Simplified test for arseniates** is proposed by John Lothian (*Pharm. Jour.*) which is especially applicable to insoluble arseniates in which the B. P. test (boiling with excess of caustic alkali, neutralizing and testing with  $AgNO_3$ ) is tedious and unreliable. Lothian proposes to dissolve the substance in dilute  $HCl$ , or, if insoluble, acidulate with that acid, add  $Na_2S_2O_3$ , warm and pass  $H_2S$  gas, when yellow arsenious sulphide will be at once thrown out. The sulphur precipitated from the sodium salt does not interfere, but if desired it may be removed by agitation with carbon bisulphide.

**Home-made Celluloid**.—The following formula makes a substance as transparent as pure glass, at the same time very pliable and strong. Dissolve four to eight parts of gun cotton in a mixture of alcohol and ether, in proportion of 1 of gun cotton to 100 of the combined liquid, after which add 2 to 10 per cent. of castor oil, or any other oil unsiccative, and 4 to 10 per cent. of Canada balsam. Flow this mixture on to a glass plate, and dry in a current of air at  $50^{\circ}$ . The result is a leaf of hard substance as transparent as glass, and very nearly unbreakable, resisting perfectly the action of all salts, acids and alkalies.

**Cocaine Reaction**.—To 0.02 gm. cocaine hydrochlorate dissolved in one drop of water is added 1 Cc. concentrated sulphuric acid; the colorless solution upon addition of a drop of potassium chromate or bichromate solution gives a precipitate which rapidly redissolves; upon moderate heating the yellowish red color changes to green, while stronger heating causes the escape of benzoic acid vapors. Other reducing alkaloids like morphine are distinguishable by other tests as, for example, the action of sodium hydrate which dissolves morphine but not cocaine.—Dr. Schaerges, *Schw. Wochenschr. f. Chem. und Pharm.*

**Solution for making syrup of iodide of iron** is made by Roussillon, according to the following formula, which he claims yields an unalterable product: A boiling solution, composed of resublimed iodine, 16.40 gm., iron filings 8 gm., and distilled water 30 gm., is filtered into a flask containing 220 gm. pure neutral glycerin, the filter washed with boiling distilled water; the liquids are well mixed and subjected to a moderate heat, until they measure 240 gm. The solution is then filled into well dried bottles, which are closed, and upon cooling the stoppers are covered with paraffin.—*Jour. de Pharm. et de Chim.*, September, 1893, p. 243. Through *Am. Jour. Pharm.*

**Thioform**.—The bismuth salt of a dithrosalicylic acid, according to the *Medical Press*, is almost insoluble in water and is suitable for surgical dressings like iodoform, to which, however, it is said to be superior. It has none of the disadvantages of iodoform or its surrogates, bismuth, salicylic acid, boric acid and the like. It has sufficient disinfecting power to permit wounds to heal under it antiseptically. It is almost non-irritant, it can be blown into the conjunctival sac, and possesses drying properties. It has no smell, is a deodorant, and relieves pain, so that Prof. Hoffmann, who has investigated it, can thoroughly recommend it. It is manufactured by Speyer and Grund, Frankfurt, A/M.

**A delicate and simple test** by means of which as little as 0.05 milligrammes of lead in one liter of water can be detected, has been devised by Dr. M. T. Lecco of the Royal Servian State Laboratory in Belgrade. In this process it is unnecessary to wait until the fine precipitate caused by the introduction of sulphureted hydrogen settles. He gives the following directions: Acidify one liter of the water with acetic acid, evaporate to 100 Cc., filter, and add one drop of diluted solution of hydrogen sulphide (1 part of saturated solution to 2 parts distilled water). If the merest trace of lead be present the water will become dark though remaining clear. For colorimetric estimation of the lead proceed as above and at the same time proceed in the same way with a specimen of the same water that is known to be free from lead and use them as a comparative standard. To this standard then add a solution containing 0.1 milligrammes of lead in each cc. until both solutions have the same intensity of color. A simple calculation based on the amount of the lead solution required to produce a color of the same intensity as that of the water under examination will then show the quantity of lead present. By using the same water for both tests (the control water not having been exposed to lead contamination) the possible error due to the presence of iron is eliminated.

**The spontaneous ignition of lupulin** is reported from Bremen. On one of the transatlantic steamers just about ready to sail smoke was seen to issue from a box; upon opening, to see the cause, the material, lupulin, burst into flame. The lupulin had been sent from some part of Bavaria and was to be shipped to this country. The unconsumed portion was found to be thoroughly caked, due to the presence of moisture, and thus furnishes the cause of the ignition: a material, rich in oil; moisture; large quantity and considerable time of storage by which the heat generated by the slow oxidation of the oil, was so much increased that it reached the ignition temperature.—*Südd. Apotheker Ztg.*, 1893, 466.

**Preparation of Hydrogen.**—J. Ball, of the Royal College of Science, notes that he has recently observed that, by the addition of a few drops of cobalt nitrate solution to the acid and zinc in a hydrogen apparatus, the rate of evolution of the gas is enormously accelerated, especially at the beginning of the reaction. The cobalt nitrate appears to be almost unaltered. A very thin film of cobalt was deposited on the zinc, but the amount deposited was much too small to weigh. A similar action is exerted by a solution of a nickel salt. Another correspondent confirms the statement made by Ball, remarking that he has been accustomed to make use of this property of the cobalt salt for some time past (*Chem. News*, lxxviii., 184).

**To Detect Artificial Coloring-matter in Butter.**—Shake a small quantity of the butter in alcohol, set aside for two or three minutes, then decant the alcohol and evaporate it over a spirit lamp. There should be no non volatilizable residue. In case the butter is colored with annatto, a brownish-red sediment forms at the bottom of the dish, which is changed to a blue color by the addition of sulphuric acid. If colored with curcumin, a deep rose colored residue will remain which turns brown when treated with hydrochloric acid and an intense brown when treated with carbonate of potassium or of sodium. Saffron produces a sediment which becomes red when treated with lead subacetate, and carrots produce one that turns green with alkali.

**Uropherine (Lithio-diuretin).**—This is a new theobromine combination introduced recently by E. Merck, Darmstadt. It is said to be much more easily absorbed than the ordinary diuretin, and the therapeutical effects are obtained with smaller doses (3-4 gr.). Lithio-diuretin is probably a combination of theobrominlithium with salicylic acid; at all events, it is recommended in the case of patients who evince an idiosyncrasy for salicylic acid, that a combination of benzoic should be exhibited. To provide for this the manufacturers have introduced theobrominlithium, lithium benzoicum, which, it is stated, affords very good results. To facilitate the prescription of theobrominlithium—lithium salicylicum, Merck has given it the name "Uropherine," under which name it will find place in his price list.

**Tetra-ethyl Ammonium** is described by Dr. Fred. Peterson (*New York Medical Journal*, No. 772, p. 320) as one of the best solvents of uric acid. He says it may be obtained by decomposing its iodide by moist argentic nitrate or its sulphate by baryta. Tetra-ethyl ammonium occurs in deliquescent hair-like needles, and absorbs carbon dioxide from the air. It is strongly alkaline and saponifies fats. It is as bitter as quinine. It has a caustic action upon the epidermis, and an unctuous, alkaline feel when rubbed between the fingers. Its formula is  $\text{NEt}_4\text{OH}$ . It is not decomposed by the galvanic current. It forms numerous salts

(sulphate, nitrate, phosphate, carbonate, hydrochlorate, hydrobromate, iodide, bromide), as well as beautiful double salts with gold, platinum and mercury.

**Coccus Cacti.**—Dr. Paul Meyer has made some observations on living cochineal insects at the Naples Zoölogical Station. The embryos develop completely within the mother, but are born within egg shells. The red pigment is not found within any organ apart from the diffuse fatty body and the yolk. It does not occur in skin, gut, salivary glands, excretory tubules, or blood, and nothing is yet known regarding its use to the insect. Carminic acid is said to be a product of metabolism. The coccerin secreted by the wax glands, which are particularly abundant near the anus, serves to inclose the excreta and so prevent the body of the insect being soiled. It passes out in long threads by the "wax-hairs" and in short curved ones by the "wax-pores" (*Fourn. R. M. S.*, 94, 324).—Through *Pharm. Jour.*

**The comparative action of iodoform on staphylococcus** and on the elements entering into the composition of blood has been investigated by Dr. E. Maurel (*Bull. Gén. de Thérap.*), who finds that the leucocytes of human blood absorb, at body temperature, the staphylococci of a gelose culture, but succumb to that absorption within two hours; the blood corpuscles separate, but dissolve and disappear after fifteen hours; and fibrin, which is at first precipitated, is redissolved after twenty-four hours. Iodoform in doses varying from 10 cgm. to 2.50 gm. per liter of blood has no toxic action on the leucocytes; on the contrary, their activity seems to increase proportionately to the dose employed. The author finds that iodoform has no apparent action on the reproductivity of staphylococcus but lessens its *virulence* against leucocytes when blood is submitted to its presence at the same time. From these results the author draws the conclusions, that three distinct properties must be recognized in various microbes, but especially in staphylococcus, *virulence*, *reproductivity* and *survivancy*, and that the efficiency of iodoform against staphylococcus, which has been demonstrated by clinical practice, is due to its double action in increasing the activity of the leucocytes, and in diminishing the virulence of the staphylococcus.

**Preservation of Cultures by Formalin.**—Hauser (*Münch. med. Woch.*) refers to his former experiments in which it was shown that cultures could be preserved by means of formalin vapor. Gegner proved that gelatin exposed for a long time to formalin vapor does not become fluid at the body heat. The author further shows that at no temperature can it be liquefied. At the same time the gelatin is in this way permanently sterilized and remains unchanged. Thus formalin is a most useful means of preserving cultures, the only condition being that they should not be allowed to dry up. It is also specially adapted for microscope culture preparations. After thus fixing the gelatin in not too thick a layer, the part which it is desired to keep should be detached with a sharp spatula. This is put on a slide with gelatin of similar composition, and a cover-glass applied. The preparation is then put into the formalin vapor chamber for twenty-four hours. Lac is applied round the cover-glass to prevent drying. Cultures can also be made on slides in the first instance. The author has tried these methods with success in the case of many micro-organisms. The culture can also be stained by a weak watery fuchsin solution. Another method is to let the colored gelatin culture dry upon the slide and then mount in Canada balsam. The colony should in all cases lie in the center of the gelatin.

**Precipitation and Boiling Points.**—R. Engel has previously shown that to precipitate one molecule of a chloride from a saturated solution at  $0^{\circ}$ , one molecule of hydrochloric acid must be added in the case of monovalent chlorides and two molecules in the case of bivalent chlorides, the law of definite proportions thus holding good even in solutions. He now shows that the same rule prevails at temperatures other than  $0^{\circ}$ , and with double chlorides. The double chloride of copper and ammonium, of which the molecule contains four atoms of chlorine, requires four molecules of hydrochloric acid for the precipitation of one molecule. It is further pointed out that, at the freezing point, in the case of saturated solutions of alkaline chlorides, bromides, and iodides, a relation exists between the solubility of the compound and the atomic weights of the elements constituting the molecule (*Comp. rend.*, cxvii., 485).—Through *Pharm. Journ.*

**Potassium Permanganate as an Antidote.**—Schlagdenhaufen and Reeb refer to the fact that J. Antal has found permanganate of potassium act as an antidote to phosphorus, muscarine, strychnine, colchicine, oil of savin, and oxalic acid, when administered to frogs, rabbits, and dogs, with or directly after the poisons, and then proceed to describe the result of experiments conducted by themselves to ascertain the effect of the permanganate upon coronillin,  $C_{11}H_{18}O_8$ , a poisonous bitter principle isolated by them some years ago from the leaves of *Coronilla Scorpioides*. They find that when the salt is placed in direct contact with the glucoside the latter is decomposed, being entirely oxidized, and physiological tests, in which frogs, pigeons, and guinea-pigs were used, seemed to prove that the permanganate is a true antidote to the poison when administered within a sufficiently brief time after the latter (*Journ. der Pharm. von Elsass-Loth.*, xx., 322).—Through *Pharm. Journ.*

**The Detection of Cotton Oil in Lard.**—The following is a method for detecting heated cotton oil in lard:

Place about ten grains of the sample to be examined in a cup-shaped porcelain capsule of about half an ounce capacity. A small disk of white filter paper (which has been soaked in hydrochloric acid, thoroughly washed with distilled water, and dried) is just moistened with a 12 per cent. solution of nitrate of silver, and placed in the concave part of a watch-glass, which, with the paper downward, is then inverted over the capsule containing the sample. The capsule is then put in a shallow oil-bath, to which heat is gently applied, until a thermometer in the bath reaches  $240^{\circ}F$ . The source of heat is then immediately withdrawn. I find that if even less than 1 per cent. of heated cotton oil be present in the sample, a very marked coloration takes place on the disk, varying from a light brown to nearly black. If the sample under examination be pure and fresh, the disk is apparently unaffected.—WILLIAM GUSTAVUS CROOK in *The Analyst*.

**Ferric Chloride for Sterilizing Water.**—F. Watts describes a simple method of sterilizing water for domestic purposes, which has been extensively employed, with apparently good results, in the Leeward Islands. It consists in adding to hard water sufficient neutral ferric chloride solution to produce a perceptible precipitate. In the case of soft water, a small quantity of lime water or dilute sodium carbonate solution is added after the ferric chloride solution, and so causes a precipitate to form. In either case vigorous stirring promotes the granulation and subsidence of the precipitate, and, after this has subsided, the clear water is drawn off for use. With small quantities of water it

may be found advantageous to subsequently pass the water through a simple form of filter, such as a felt bag, or clean sand in a shallow box or a flower-pot, but this is unnecessary with large quantities. One to one and a half fluid ounce of B. P. liquor ferri perchlor. fort. is stated to be sufficient to purify one hundred gallons of water. By treating sufficient for a day's supply at night, the pure water will be ready for use in the morning (*Chem. News*, lxviii., 178).

**Basic organic bismuth salts** can be made by taking advantage of the solubility of bismuth chloride in a 25 per cent. solution of sodium chloride or other alkaline chloride and adding the organic acid to this solution. *Basic bismuth gallate*: 100 gm. bismuth chloride are dissolved in 1,800 gm. sodium chloride solution (25 per cent.), filtered, 400 gm. gallic acid added, boiled for 20 minutes, replacing the evaporated water, and pouring into an excess of water sufficient to retain in solution the excess of gallic acid; the precipitate is washed and dried; the product contains 49.2–50 per cent. bismuth and corresponds to the formula  $C_6H_5(OH)_3COOBi(OH)_2$ . *Basic bismuth pyrogallate*: 150 gm. pyrogallol are dissolved in 650 gm. and 316 gm. bismuth chloride are dissolved in 1,000 gm. solution of sodium chloride (25 per cent.); the filtered solutions are mixed, heated for one-half hour in a water-bath and poured into such a volume of water (about 20 volumes) that precipitation of the basic salt commences; after some time the precipitate is collected, washed with water until the acidified washings cease to react with silver nitrate; the product, apparently, has the formula  $C_6H_5(OH)_3O_2Bi(OH)_2$ .—Dr. A. Voswinkel, *Pharm. Ztg.*, 1893, 594. Through *Am. Jour. Pharm.*

**The Bacteriology of Aerated Waters.**—With cholera in the land, many people are naturally anxious about what they should drink, so that we consider it timely that Dr. Charles Slater, lecturer on bacteriology at St. George's Hospital, should have published a paper embodying the results of a bacteriological examination of aerated waters, says the *Chemist and Druggist*. The points which Dr. Slater investigated (to a large extent, we understand, in the Idris laboratories) were (1) the source of the water and the methods employed in its purification; (2) the number and the nature of the micro-organisms present in mineral waters derived from various sources; (3) the action of  $CO_2$  on the microbes present in aerated waters; and (4) its action under various pressures on certain pathogenic organisms. Under the second head we notice some startling figures, the number of organisms in 1 c.c. of the waters twenty-four hours after aëration varying from 354 to 2,919. In the course of three weeks the organisms almost entirely disappeared. An important fact is that simple aëration kills off the greater number of the organisms. Thus, a water which contained 2,172 per c.c. before aëration, showed only 433 after. This was further proved on studying the third problem. Experimenting with pathogenic organisms, including the microbes of typhus and cholera, it was found that they were killed in from a week to a fortnight, although at the end of two months they were still alive in plain distilled water. It is the  $CO_2$  which kills the organisms. Dr. Slater also remarks that "bottled aerated water prepared from a main-water passed through a Berkefeld filter showed the presence of a comparatively small number of micro-organisms." He concludes that "an aerated water made from a good source, and kept for more than fourteen days, appears to offer complete safety from the usual water carried diseases." There is much else in the paper which should interest aerated-water makers who can appreciate the importance of bacteriological research.

**The rapid detection of tin**, in salt solutions, even in presence of iron, copper, or other reducing substance, is effected by G. Dénigès (*Bull. Soc. Pharm. de Bordeaux*) by means of a molybdo-sulphuric solution (molybdate of ammonium, 10 gm.; distilled water, 100 Cc.; pure sulphuric acid, 100 Cc.). Several drops of the suspected solution are placed on a platinum dish with one drop of sulphuric acid, and a piece of zinc is placed on the platinum in contact with the liquid; after one or two minutes the zinc is removed, the dish washed under a thin stream of water, allowed to drain, and if a metallic stain is found on the platinum, at the place of contact with the zinc, it is wetted with 4 or 5 drops of hydrochloric acid, and evaporated to complete dryness. Several drops of water are now placed on the dry residue for several minutes, and one or two drops of the liquid so obtained are added to 2 or 3 Cc. of the molybdo-sulphuric solution, when an instantaneous blue coloration will show that tin is present in the solution examined.

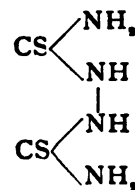
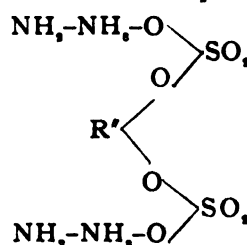
**Choparro Amargosa.**—Mixon (*Texas Sanitar.*; II, No. 10) describes Choparro Amargosa as a small, thorny bush that grows in Southwest Texas, belonging to the natural order Simarubacæ (which also includes quassia and simaruba). The bark, leaves, thorns, flowers, and fruit, all have an intensely bitter and characteristic taste. The tendrils contain the active principle in greatest proportion, and are generally selected for pharmaceutical purposes. The plant yields its virtues to boiling water, in the proportion of from 2 to 4 ounces to the gallon [1-2.64]. The dose of the fluid extract, as a tonic, is from 10 minims, to  $\frac{1}{2}$  fluid ounce [0.6-15 Cc.]; as a stimulant, from three fluid drachms to one fluid ounce [11-30 Cc.]. Large doses cause flushing of the face, and fulness of the head. The odor of the drug can be detected in the urine, although no appreciable effect upon the renal secretion has been observed. All parts of the bush are said to possess medicinal virtue, except old stock. The drug is credited with some antiperiodic properties, which might make it a desirable remedy in the treatment of malarial dysentery. The active principle, upon which the properties of the drug are supposed to depend, has not yet been isolated.

**Active Principles of Dorstenia Contrayerba.**—*Dorstenia contrayerba*, a Brazilian plant, of the family of the Urticacæ, was first analyzed some years ago by Peckolt, who named its chief active ingredients *dorstenin* and *dorstenic acid*. It has recently been investigated by Mussi (*Rif. Med.*), who published the following results: (1) The aqueous infusion is acid and strongly reduces Fehling's solution; it foams strongly on being shaken, becomes turbid on the addition of alcohol, and clear again on the addition of nitric acid. The plant yields about 3 per cent. of ash. (2) An alcoholic extract of the root yields, by suitable treatment, two substances called provisionally *cajapine* and *contrayerbine*. The first is a dark yellowish-red amorphous substance, soluble in water, alcohol and ether. It leaves no residue on ignition; its vapors have an acid reaction; its solution does not reduce Fehling's solution; the addition of an alkali produces a yellow-blue fluorescence. It gives precipitates with lead acetate, silver nitrate, ferric chloride, gold or platinum chloride, bromine water, tannic and phosphomolybdic acids. It is unaffected by picric acid, and apparently unaltered by the mineral acids. Contrayerbine is white and amorphous, burns without residue, is soluble in alcohol and ether, but not in water. By treatment with tartaric acid, in alcoholic solutions, it forms a tartrate which is soluble in water. Its solutions give precipitates with gold or platinum chlorides, with Bouchardat's re-

agent, bromine water, picric acid, or phosphomolybdic acid; but it yields no precipitate with tannic acid. The physiological action of the new substances is being studied by Coronedi.

**Hydrazin.**—F. Schrader shows that the hydrate of this compound,  $N_2H_4 \cdot H_2O$  (*Pharm. Journ.* [3], xix., 702), decomposes sooner or later, even when inclosed in sealed tubes, ammonium hydrate being the chief product formed. He also describes a series of double sulphates with the general formula  $R'SO_4 \cdot (N_2H_4)_2 \cdot H_2SO_4$ , where  $R'$  may represent copper, nickel, cobalt, iron manganese, zinc, or cadmium. They contain no water of crystallization, dissolve with difficulty, and may be prepared by simply mixing solutions of the constituent sulphates. The accompanying formula

probably represents the constitution of the double salts. Double chlorides of fixed composition were only prepared with difficulty. A new compound of hydrazin was prepared by saturating the hydrate with sulphocyanic acid or by decomposing the sulphate with barium sulphocyanide. The resulting hydrazin sulphocyanide,  $N_2H_4 \cdot HSCN$ , is described as a deliquescent substance, melting at  $80^\circ$ . On heating it for four or five hours in a sealed tube at  $100^\circ$ , another new compound, of urea-like constitution, was formed, hydrazin sulphocarbonide. This is described as crystallizing from a hot aqueous solution, melting at  $214^\circ-215^\circ$ , and possessing acid properties (*Chem. Zeit.*, xvii., Sept).



### Peruvian Balsam.

This article is the product of the *Myrospermum salviatoriensis* or *Hoitsiloxiti*, which grows almost exclusively on the "Costa del Balsamo," or "balsam coast," of Salvador, comprised by the southern shores of the department of Sonsonate and La Libertad.

The balsam is a beautiful tree averaging one hundred feet in height and 20 inches in diameter. There are two ways to extract the liquid, erroneously styled Peruvian balsam. The first consists in scraping the skin of the bark to the depth of one-tenth of an inch with a sharp machete in small spaces some 12 to 15 inches square all along the trunk and stout branches of the tree. Immediately after this operation the portions scraped are heated with burning torches made out of the dry branches of a tree called "chimaliote," and after this pieces of old cotton cloth are spread on the warmed and half-charred bark. By punching the edges of the cloths against the tree with the point of the machete they are made to adhere. In this condition they are left for 24 and even 48 hours (in January), when the rags are gathered and submitted to a decoction in big iron pots. After this the rags are subjected, while still hot, to great pressure in an Indian machine made of strong ropes and wooden levers worked by hand. The balsam oozes out and falls into a receptacle, where it is allowed to cool. This is called raw balsam. To refine it, they boil it again and drain it, after which they pack it in iron cans ready for market.

The other method of extracting balsam consists in entirely barking the trunk and heavy branches of the tree, a process which, as a rule, kills it outright and at best renders it useless for several years. The bark is

finely ground, boiled and submitted to pressure in order to extract the oil, which is considered of an inferior quality to that obtained by the system first described. Both methods are defective, but the latter is ruinous and forbidden by the authorities.

The name of Peruvian balsam was given to this article because it was first sent from San Salvador to Peru in the time of the Spaniards and from Callao re-shipped to Europe.—*U. S. Consular Report.*

#### Macassar Oil.\*

By ROBERT GLENK.

The true macassar oil, prepared from the seeds of *Schleichera Trijuga*, Willd., one of the East Indian Sapindaceæ has a great reputation in its native country as a stimulating application to promote the growth of the hair and also as a remedy in skin diseases, especially eczema.

It is obtained either by expression or by boiling the bruised seeds in water and skimming off the oil which rises to the surface.

It has in former years been imported into this country; latterly, however, a product under the name of macassar oil but which in reality was mainly composed of cocoanut oil in which the blossoms of Ylang Ylang, *Cananga odorata*, or of the false Ylang Ylang, *Michelia champaca*, N. O. Magnoliaceæ, have been digested began to make its appearance on the market and took the place of the former. Now, mostly domestic oils under the same name, suitably perfumed and frequently colored red with alkanet, have entirely replaced the natural product.

The writer recently received a small sample of the true macassar oil from Mirzapoor, Hindoostan. At the ordinary temperature it is semi-solid, of a yellowish white appearance and has a weak odor of bitter almonds. It is said to contain hydrocyanic acid and it is not unlikely that in the stimulating properties of this constituent the cause of the ascribed beneficial action of the oil may reside.

It has a mildly acrid taste, probably due to partial rancidity, and an acid reaction to litmus paper. It is completely liquefied at 82° F. (28° C.) and congeals near 50° F. (10° C.). The oil is readily saponified by sodium hydrate, even at a low temperature, the soap being white and hard. With nitrous acid it assumes an orange red color and becomes viscid, but does not seem to solidify. On adding 5 drops of the oil to 20 drops of concentrated sulphuric acid it acquires a reddish brown color. The oil is freely soluble in chloroform, ether, bisulphide of carbon, benzol, benzine and the fixed and volatile oils, but only slightly soluble in alcohol. It has a specific gravity of 0.942.

An excellent formula for preparing a so called macassar oil for the hair, and which has given great satisfaction to those who have used it, is the following:

|                            |                     |
|----------------------------|---------------------|
| Castor oil.....            | 16 f oz.            |
| Alcohol.....               | 3 f oz.             |
| Oil of nutmeg.....         | 30 min.             |
| Oil of rosemary.....       | 10 min.             |
| Oil of sweet marjoram..... | 10 min.             |
| Oil of neroli.....         | 10 min.             |
| Oil of rose.....           | 30 min.             |
| Tincture of musk.....      | 1 f 3               |
| Alkanet.....               | sufficient to color |

Macassar Pomade, made by the following formula, also makes an excellent preparation:

|                            |                     |
|----------------------------|---------------------|
| Castor oil.....            | 10 oz weight        |
| Suet.....                  | 2 oz.               |
| Spermaceti.....            | 1 oz.               |
| Oil of nutmegs.....        | 1 f 3               |
| Oil of sweet marjoram..... | 1 f 3               |
| Oil of rosemary.....       | 1 f 3               |
| Oil of rose.....           | 15 min.             |
| Oil of rose geranium.....  | 10 min.             |
| Alkanet root.....          | sufficient to color |

Melt the spermaceti and suet adding the castor oil previously colored by digesting with alkanet, and lastly add when nearly cold the perfumes, which in this case are also the medicaments.

#### The Examination of Potable Waters.\*

By E. J. PARRY, B.Sc.

Water analysis naturally divided itself into several heads. The author would, however, confine himself more especially to potable waters. The examination of these falls under four principal heads: I. Physical examination. II. Estimation of inorganic constituents. III. Organic analysis (most important). IV. Biological examination.

**I.—Physical examination.**—Great care must be exercised in obtaining a sample of the water. The best vessel for collection is a clean stoppered 5 gallon bottle, rinsed out first with a little of the water to be tested before filling. If the water be drawn from a tap, allow it to run for two minutes before collection; if from a river, collect in mid-stream and open the bottle under water. Should the sample collected with these precautions be distinctly turbid and possess a disagreeable odor and taste, it will be condemned on these grounds alone. Otherwise it is advisable always to note the color of a water carefully. Loviband's tintometer does this best. This consists of two tubes, into one of which distilled water is poured, into the other the sample. A set of tinted glasses enables one to get the same tint from the distilled water as from the water examined. The color obtained is then interpreted by the table.

**II.—Inorganic analysis.**—Except in the case of a very polluted water, qualitative analysis is no use. The direct addition of Nessler's reagent, testing for nitrites and metals, and estimating roughly the action with acidified solution of potassium permanganate, are all that need be done. If the water is not hopelessly bad, a quantitative examination must be made as follows:

**Determinations.**—The chief are: 1. Organic and inorganic solid residue. 2. Chlorine. 3. Phosphoric acid. 4. Sulphates. 5. Nitrous acid. 6. Nitric acid. 7. Hardness. 8. Poisonous metals. Results would be expressed in this paper by grains per gallon, the most unscientific method, but the one best understood by the public.

1. Total residue.—Evaporate 70 Ccs. in a platinum dish on a water bath, then heat to 110° in an air bath. The weight, in milligrammes, of the residue gives the number of grains per gallon, since as a milligramme: 70 Ccs. so is 1 grain: 1 gallon. The dish should be cooled in a desiccator before weighing, not in the open air, as Wanklyn says. Next the dish should be ignited and the result noticed. If the water is pure no blackening should occur.

2. Chlorine.—Concentrate 210 Ccs. to 30 Ccs., and titrate with a fairly weak solution of silver nitrate (equivalent to 2 milligrammes Cl. per Cc.)

3. Phosphoric acid.—This exists in very small quantities in drinking water. A rough approximation, therefore, only is necessary or practicable. Treat the solid residue with a few drops of nitric acid, dry to render any silica quite insoluble, re dissolve in a few drops more of the acid and 2 or 3 Ccs. of water. Filter, warm gently with a few drops of acid solution of ammonium molybdate. Yellow coloration is given with traces of phosphoric acid, and distinct ppt. even

\*American Journal of Pharmacy.

\*Read at a meeting of the Chemists' Assistants' Association, of London, Eng.

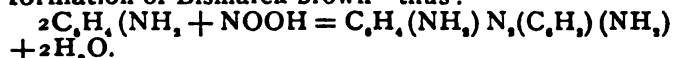
with minute quantities. The color may be imitated by a standard solution of sodium phosphate if estimation be required.

4. Sulphates.—Concentrate a portion, acidify with hydrochloric acid and ppt. with barium chloride.

5 and 6. Nitrates and nitrites.—The estimation of these is very important. There are several methods for doing this.

(a) Reduction method.—Thorpe recommends this method. Make a copper-zinc couple by immersing a zinc-foil in a weak solution of copper sulphate until covered with a black spongy coating. Wash the strip well, and distill off 70 Ccs. of the sample from this couple. The ammonia formed from the reduction of the nitric acid is estimated in the usual way. The following modification answers better: The water is left on the couple for 24 hours at the ordinary temperature, the couple being then removed. Complete reduction of the acids is then insured without so much risk of breaking up any organic nitrogenous matter by boiling with a strong reducing agent. This method is a good one. Each molecule of ammonia is equivalent to one of either nitrous or nitric acid; the former must be got at and deducted.

Nitrous acid.—Metaphenylenediamine in acid solution is best for this. The yellow brown color obtained is compared with that from a standard solution of potassium nitrite, just as ammonia is estimated by Nessler's reagent. The brown color is caused by the formation of Bismarck brown—thus:



(b) Indigo process.—This is not satisfactory. It depends on the oxidization and decolorization by the acid, and very variable results are obtained, unless the experiments do not differ at all in their conditions. A little organic matter also interferes to a large extent.

(c) Potassium iodide and starch test is rather popular, and consists of imitating by standard solutions the colors obtained by the action on starch of the iodine liberated from potassium iodide by the nitrous acid. Nessler glasses are also used for this. One of nitrous acid is by this indicated in ten millions in a few minutes or one in a thousand millions in 48 hours.

(d) Griess's test is so delicate that it can hardly be used quantitatively. It quickly indicates one in a thousand millions, and is performed thus: To 10 Ccs. of the sample add first one drop of dilute hydrochloric acid, then one drop of strong solution of sulphanilic acid, lastly one drop of saturated solution of naphthylamine hydrochloride. The color is pink or red, according to strength, and is imitated by standard solutions.

7. Hardness.—Dr. Clark's soap test.—A standard solution of soap is prepared of such strength that 1 milligramme of carbonate of lime, held in solution by carbonic acid, is precipitated by 1 Cc. of it. The soap solution is gradually added to 70 Ccs. of the sample, with frequent agitation, and the point at which a permanent lather, or one lasting for five minutes, is formed is noted. Every Cc. added corresponds to one degree of hardness. If more than 15 or 16 degrees are recorded, distilled water must be added so as to bring it down to this, and a smaller quantity used. The permanent hardness is similarly estimated after removing carbonates by boiling to one-third of bulk.

8. Poisonous metals are estimated by comparing colors obtained by usual reagents with those got from standard solutions. Copper in very small quantities may be detected by potassium ferrocyanide on concentrated samples, especially if a little ammonium nitrate be added; zinc by the same reagent. The former

metal had been found by the author in sufficient quantities in distilled water from the best London houses to condemn it as a drinking water.

III.—Organic Analysis.—Organic impurities demand most attention. 1. The use of potassium permanganate to oxidize the organic matter is still a very important method. A known quantity of the sample and of a standard solution of the permanganate with excess of dilute sulphuric acid are stood in contact for four hours at 80°, and then the amount of permanganate left is estimated. From this the amount absorbed is found. The permanganate standard solution generally is such that 10 Cc. provide 1 milligramme of oxygen. As the acid absorbs a little of the permanganate, a blank estimation is first done by calculating from the amount of sodium thiosulphate required to decolorize the iodine set free by the reaction of potassium iodide and undecomposed permanganate compared with the amount required for the blank solution, whose strength in oxygen was regulated by the addition of permanganate solution. Starch is used as indicator. An objection has been raised to this process, in that albumen does not readily absorb oxygen from the permanganate. Whatever be the nature of the organic impurities (it is easy to talk of albumenoids, but not so easy to produce evidence of the real nature of these impurities) the oxygen absorbed from permanganate, the so-called albumenoid ammonia of Wanklyn, and the direct estimation of organic carbon and nitrogen, by Frankland's process, show results nearly always coincident. The moist combustion process, a modification of the last test, is performed by boiling a liter of water down to 100 Ccs. with permanganate, and estimating the permanganate used up.

Wanklyn's and Frankland's Processes.—The former is more general and simpler, the latter tedious, expensive and difficult in manipulation. Wanklyn says the latter is untrustworthy, but the author of this paper considers it to be undoubtedly the nearest approach to a scientific analysis of water yet introduced. These two processes are the only ones, excepting the oxidation process, commonly used in this country.

2. Wanklyn's Process.—Solutions required are a .03146 grammes to the liter solution of ammonium chloride, Nessler's solution (the great secret in preparing this is to keep the ingredients quite cool when mixing), alkaline permanganate solution (8 grammes of permanganate, 200 of sodium hydrate, 1,100 Ccs. of distilled water, boiled down to two-thirds, to make certain of any organic nitrogenous matter breaking up). Preserve this last in a well-stoppered bottle. Care must be taken that all water used is free from ammonia. If only a little is wanted, distil tap water with a few drops of sulphuric acid; if a large quantity, collect distillate after the still has been at work two hours. For drinking water 700 Ccs. is generally taken. To insure freedom from ammonia in the condenser the still is first boiled out, and the sample distilled till the distillate contains no more ammonia. The distillate is usually collected in lots of 50 Ccs., in Nessler's glasses, which are tested by comparison with standard solution of ammonia or Nessler's reagent. A grain or two of sodium carbonate may be added before distilling, to volatilize completely the ammonia. This will give the so-called free ammonia. By this method ammonia may be obtained from other bodies. The "albumenoid" ammonia is got by distilling the remains in the retort with the addition of 50 Ccs. of the alkaline permanganate solution. The process is rapid and approximate, but as different organic bodies yield different percentages of their total nitrogen, thus treated, the amount found is no clue to the amount of organic matter, and a sudden reap-

pearance of ammonia sometimes occurs on prolonged distilling, after it seemingly had been all released.

3. The Frankland-Armstrong process, as it is called sometimes, is worked thus: A liter, or less if the water is poor, is usually taken. Every piece of apparatus must be quite clean, and should be washed with strong sulphuric acid and purest possible water, and the reagents must be quite free from organic contamination. The copper oxide should be burned in a muffle for four or five hours at least before use. Place the sample in a flask of about a liter and a half capacity, add 10 Ccs. of pure sulphur dioxide solution, 10 Ccs. of solution of acid sulphite of sodium with excess of sulphur dioxide, and three or four drops of ferrous chloride solution. Boil for half a minute to expel the carbon dioxide, cool and evaporate to dryness over a water bath. It is then mixed with the copper oxide and placed in the usual manner in the combustion tube. The gases from ordinary London water seldom measure more than 7 Ccs. They are a mixture of sulphur dioxide, carbon dioxide, nitric oxide, and nitrogen. The first named is absorbed by potassium bichromate; the nitric oxide is oxidized to nitrogen peroxide and absorbed by caustic potash, the excess of oxygen is removed by pyrogallol, and the residual gas is pure nitrogen.

**IV.—Biological Examination.**—Before this is done the examination is not complete. The suspended matters at least must be subjected to careful microscopical examination, to see any evidence of organic pollution in muscular tissue or vegetable cells, or in second rate water, even large living organisms. The enumeration of the organisms as in an ordinary bacteriological examination is of relative value only, and in the author's opinion of little value for hygienic purposes. Determined for definite pathogenic organisms by a specialist, bacteriological examination is very valuable. Muscular fibers being present is of great importance, and points to sewage or other objectional organic refuse.

### MODERN IODOFORM.\*

By LUTHER F. STEVENS, Brooklyn.

Given an alkaline solution containing the combining radicle methyl  $\text{CH}_3$ , or a compound from which it may be easily obtained, and to that present in acceptable shape any of the haloids, a triatomic ether results having three of the corresponding haloids placed upon three units of carbon, one hydrogen remaining and two being given off. These still hold an ancient terminal to the common name, as fluoro, chloro, bromo, iodoform, because they were at first supposed to be derivatives from formic acid  $\text{CH}_3\text{O}_2$ , and upon that basis chloroform had for its chemical title trichloride of formyl.

Alcohol was formerly used to furnish the methyl needed, that being split off and the alcoholic radicle remaining giving formates of the alkali used,  $\text{CH}_3\text{CH}_2\text{OH} + \text{NaOH} + 3\text{Cl} = \text{CHCl}_3 + \text{CHOONa}$ , but of late years acetone has come into use because having an ethereal methyl much more easily removed than the component one of alcohol, and being now readily obtained on account of its production by the works distilling wood for methyl alcohol and acetic acid.

Although these facts have been long known, yet it is but a few years since available commercial processes were devised which gave from this source chloroform at much less cost than before; and still further time

was required to develop others of the series on a profitable industrial scale which was inaugurated by two chemists in France, MM. H. Suilliot and H. Raymond, who brought out

#### ODOFORM FROM ACETONE.

These two gentlemen working upon kelp ashes, brought in quantity from the French sea coast to the City of Rouen on the River Seine, not far from its mouth, a famous town for chemical and other factories, schemed out a method for working up the iodine contained in this seaweed directly into iodoform instead of endeavoring to produce iodine alone in competition with England, which country controls the "nitrate" beds on the western coast of South America.

The kelp ash as it arrives is percolated with water as formerly for iodine, the solution containing all soluble salts; then, instead of concentrating and freeing from other salts than iodides by crystallization, only sulphates and sulphides which appear in traces are gotten rid of, the filtered liquid containing chlorides, bromides and iodides is now treated with acetone and hypochlorites, when iodoform commences to fall in a voluminous, cloudy precipitate, and upon completion of this reaction the bromides are obtained from the residual mother liquors.

This is the original claim of the patentees, although other statements have appeared in print by those who have visited the plant but apparently not comprehended all of the steps.

As thus obtained it was called "absolute iodoform," from its greater solubility and less order; it is very light, apparently amorphous but really in exceedingly minute scaly crystals. It is nearer to pale salmon in color than lemon yellow, is very soft in texture, no longer harsh when applied to sensitive surfaces. It requires no purifying with accompanying recrystallization and final powdering, and dissolves without residue in alcohol, ether, chloroform and bisulphide of carbon.

Their works were soon able to undersell both English and German makers, and soon these for self protection had to call down the iodine ring. Quite possibly you may remember that in 1889 a heavy drop appeared in the price of iodoform and iodine which has not since been raised, and that iodoform of the present day is entirely different in appearance from the older kind. We do not enjoy the smell now, but should you take a bottle of the old orange yellow crystals, and one of this opened at the same time, the wonderment would be, however did we stand it?

These gentlemen published their methods in the Spring of 1889 and at the same time gave an alternate process for small work by which potassium iodide, the cheapest salt made, can be utilized, and this latter seems now to be used by all who have not access to seaweed, because it has proved much easier, simpler, quicker and less costly than by any procedure from alcohol, as it is claimed that 98 per cent. of iodine is transformed against 75 per cent. of the best heretofore and then only by tedious successions of manipulation.

My attention was drawn some two years ago to this subject because it was new in application although old in theory, that there were three formulas existing in this country, and because of its adaptability for class experimentation the latter proved a success.

The difference in proportions given led to a series of experiments which confirmed the theoretical position, which it will be seen is practically the line given by the two gentlemen of France.

The original in the reprint which I have seen reads:

|                                       |              |
|---------------------------------------|--------------|
| KI.....                               | 50           |
| Acetone.....                          | 6            |
| HoH or NaOH.....                      | 8            |
| All in water.....                     | 1000 to 2000 |
| Dilute solution of hypochlorites..... | Q. S.        |

\*Abstract of paper read before the Kings County Pharmaceutical Society at the October meeting of 1891 and communicated by the author.

One gentleman in careful endeavor to give a comparison of this and other ways, and where costs are particularly under attention, is reported in A.P.A. Proceedings 1890, page 612, from proceedings of Michigan State Association 1889. Mr. T. W. Bowen states that in working upon one pound lots he was able to produce nearly at 22 per cent. less than by Filhol's, labor and time not being counted on either side, which, if done, would have made the balance still greater. His reads:

|   |       |
|---|-------|
| KI.....   | 75.0  |
| Acetone.....  | 9.3   |
| NaOH.....   | 1.9   |
| Water.....  | q.s.  |
| Solution of chlorinated soda, formula of 1870, about..... | 73.81 |

Another gentleman, Mr. Boyce, of Ann Arbor, claims that the first publishers were impractical, and gives a revision in which a strong point is made of necessity for a large excess of acetone.

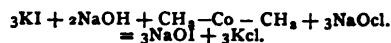
|  |      |
|--|------|
| KI.....  | 50   |
| Acetone.....                                     | 40   |
| NaOH.....  | 5    |
| Water.....                                       | 1000 |
| Official solution of chlorinated soda, 1880..... | q.s. |

A strictly molecular formula would be laid out in this manner:

|             |   |       |
|-------------|---|-------|
| Sol. No. 1. | 3KI 496.8.....                                | 49.68 |
|             | CH <sub>3</sub> -Co-CH <sub>3</sub> 58.0..... | 5.80  |
|             | 2NaOH 80.....                                 | 8.00  |
|             | Water 10,000.....                             | 1000  |

|             |                    |       |
|-------------|--------------------|-------|
| Sol. No. 2. | 3NaOCl 223.50..... | 22.35 |
|-------------|--------------------|-------|

in dilute solution as contained in solution of chlorinated soda, U. S. P. 1870, the best.



$3NaOI + CH_3 - Co - CH_3 + 2NaOH + 3KCl = CHI_3 + CH_3 - Co - Na + 4NaOH + 3KCl$  + other sodium salts present in solution No. 2, as chlorides, carbonates, and so forth, these being in variable quantities.

Then 379.8 of theoretical iodine in the salt and 15. of methyl from the acetone less two hydrogens = 13, yield 392.8 of iodoform, and of this the workers say that 98 per cent. can be reclaimed in the long run, and as all side products formed are soluble in the mother liquor and also in water the precipitate is easily washed and requires no further treatment.

The objector to the original formula bases his excess of acetone upon a theory that all alkalis present and freed during the process are taken up as acetates, and in consequence more ultimate product is obtained. His actual difficulty comes from another source, the chlorinating liquor, which as said before is variable; for this purpose it should have a large excess of soda, therefore the formula of 1870, when strictly carried out with high test bleaching powder as we would ordinarily do when upon special work, is better than that of 1880, which liberates iodine too fast. When the latter is made from commercial materials it will average well, as not all the carbonate is decomposed.

Both solutions need to be alkaline, number one strongly by means of caustic, and number two through carbonate always present and more so in the 1870 preparation. It is sometimes a good plan to add a bicarbonate to number two before using, because in this finely balanced structure by using dilute solutions, and chlorinating slowly, iodine, sodium and acetyl are liberated in proportionate quantities and no loss of iodine occurs by formation of iodates, which are the bane in alcoholic procedures where heat must be used. To prevent this possibility by too fast additions of number two a slight excess of acetone is desirable. When large, however, it clings to the precipitating iodoform, adding its peculiar smell to what is already bad, and is only removed by long washing.

No. 1 solution should be placed in a tall cylinder having some four times that capacity, and arranged for convenient agitation, the chloridizing liquid allowed to pass quite slowly, and for small lots caused to drop from a height sufficient to give a slight circulation from

the force of each impact. With a test tube a small filter fitted in the mouth answers; for a thousand gramme cylinder a funnel is needed, and the whole given an occasional rotary motion; for four or five thousand gramme containers a cover holding several funnels. Large works use filtering colanders with holes allowing drops at a time to fall some two or three feet, or a spray apparatus and mechanical agitation, never a stream or a large quantity at once. When commencing an operation it is often advantageous to dilute number two one-half or more, and possibly, as said before, to add sodium bicarbonate.

The first drops upon contact should immediately cause a cloudy and heavy precipitate of salmon tint. If a reddish ring appears around each, then hypoiodides are formed too fast; because either the dropping liquor is too strong or not sufficiently alkaline, needing the correction given in the paragraph above. By the time, however, that the original solution has doubled from additions, number two can be added stronger and a little faster; if now the red coloration appears give acetone in small portions at a time as it is being used up by chlorides from number two. One or two trials will serve to adjust this. If to 1,000 Cc. of solution at this stage showing redness 10 Cc. do not serve to give the immediate cloud then alkalinize a little, but this step is seldom needed here as the solution has been growing in alkalinity with its additions; it is more apt to need acetone, and that is cheaper than to lose iodine by degeneration to iodates.

With a starting solution of two to five liters the precipitating will apparently cease in about one hour if the dropping has been constant and in sufficient quantity, allow time for complete settlement, decant the supernatant clear liquid, which being quite dilute and alkaline can be treated much faster, while the precipitate is being filtered, washed and dried, using the same precaution as before as to color. If now there has been kept a slight excess of acetone, when available iodine has been used up, the hypochlorites will attack that and build chloroform in sufficient quantity to be readily perceived by its smell.

The mother liquor will hold in solution considerable iodoform, so it is wise to again decant from the second precipitate, and treat still more freely with number two when the major portion will be thrown out. The remaining liquor after yielding this last deposit upon a filter, being surcharged with hypochlorites, alkali, and other decomposition products, including a remnant of iodoform, is available for treating tail end liquors from the succeeding batch in place of new soda solution, thus recovering about the last possible portion from each; in any case whether working with this or new remember that an excess redissolves some of the precipitate we wish to save.

When working upon quantities, all operations are conducted in rooms where no direct sunlight enters, owing to its rapid decomposing effect upon this new formed product. For small work and accurate determinations keep test tubes or cylinders wrapped in two or three thicknesses of manila paper and filter in a shady corner, drying wet filter and contained precipitate rapidly in a column of warm air.

Owing to this great change in physical appearance between iodoform of to-day and ten or five years ago, a strong attempt was made by several gentlemen of the American Pharmaceutical Association to get the text changed regarding description in the Pharmacopœia of 1890, but it still remains "in small lemon yellow crystals," and not a suggestion that another style is much more if not entirely used, which is soft, voluminous and as having no crystals visible to the naked eye.

## Notes, Queries, and Answers.

We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.

When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.

**Stove Blacking.**—G. H. B., Pittsfield, Mass., wishes to know how to make a paste of plumbago that will not dry. As he probably wishes to use it as stove blacking, we give several formulas below:

1.—Mix two parts of black lead, 4 parts of copperas and 2 parts of bone black, with water, so as to form a creamy paste. This is an excellent polish, as the copperas produces a jet black enamel causing the black lead to adhere to the iron.

|                  |        |
|------------------|--------|
| 2. Plumbago..... | 2 lbs. |
| Water.....       | 8 ozs. |
| Turpentine.....  | 8 ozs. |
| Sugar.....       | 2 ozs. |

Knead thoroughly and keep in tin boxes. Apply with a brush.

3. Plumbago, make into a thin paste with sodium silicate or water glass. This makes an excellent stove polish and should be brushed thoroughly.

|                               |         |
|-------------------------------|---------|
| 4. Pulverized black lead..... | 2 lbs.  |
| Spirits of turpentine.....    | 2 gals. |
| Water.....                    | 2 ozs.  |
| Sugar.....                    | 2 ozs.  |

5. Mix 5 parts black lead, 5 parts bone black and 10 parts of iron sulphate. Use water q. s. to form a paste. This is an excellent preparation and the coating is very permanent.

6. Reduce graphite to an impalpable powder by grinding in a mill with water, dry; use with water first, then dry and polish. This is the base of nearly all commercial stove polishes.

7. Turpentine and black varnish, put with any good stove polish, is the blacking used by hardware dealers for polishing heating stoves. If properly put on, it will last throughout the season.

**Paste Stove Polish:**

|                            |         |
|----------------------------|---------|
| Pulverized black lead..... | 2 lbs.  |
| Spirits of turpentine..... | 2 gals. |
| Water.....                 | 2 ozs.  |
| Sugar.....                 | 2 ozs.  |

**Liquid Stove Polish:**

|                                      |          |
|--------------------------------------|----------|
| Bone black.....                      | 2½ parts |
| Pulverized graphite.....             | 2½ parts |
| Copperas.....                        | 5 parts  |
| Water, q. s. to form a creamy paste. |          |

**Liquid Black Lead Polish:**

|                            |          |
|----------------------------|----------|
| Pulverized black lead..... | 1½ lbs.  |
| Turpentine.....            | 1½ gills |
| Water.....                 | 1½ gills |
| Sugar.....                 | 1½ ozs.  |

**Kephir.** C. C. B., New York.—Kefir or Kephir is a drink containing lactic acid and alcohol and made by fermenting milk. The fermentation is induced by the addition of kefir grains. These occur in irregular clumps varying from the size of a bean to that of a walnut, consisting of a peculiar ferment, composed largely of the *Bacillus Caucasicus*, also known as *Dispora kaukasica* or *Bacterium Caucasicus*.

The bacillus itself forms rod-cells 3.2 to 0.8 micromillimeters long and 0.8 micromillimeters broad, sometimes provided with a flagellum and exhibiting a slow oscillatory movement. It has a spherical enlargement at each end in each of which forms a spore 0.8 micro-

millimeters in diameter. The ferment originally came from the Caucasus, but is now cultivated all over the civilized world to a certain extent.

**Antidotes.** J. E. E., New York.—We give below a list of the more common poisons and their antidotes. To present a complete list would take up more space than would be desirable. It should be understood that the stomach must be emptied as nearly as possible of its contents before the antidote is administered, except in cases where an emetic is contra-indicated, as the corrosive acids. Emesis may be brought about either by the use of the stomach pump or emetics; the former method being the more preferable.

**Acids (mineral).**—Alkalies, lime water, soap, oil, mucilage. (The stomach pump or emetic should not be used in case of poisoning by mineral acids.)

**Arsenic.**—Hydrated sesquioxide of iron, dialyzed iron, hydrated magnesia; followed by opium and stimulants.

**Belladonna and atropine, hyoscyamus and hyoscyamine.**—Opium, eserine and pilocarpine; tannin, compound solution of iodine.

**Carbolic Acid.**—Saccharated solution of lime, sulphate of soda or magnesia in solution.

**Chloral.**—Strychnine, ammonia, atropine, galvanism, heat.

**Chlorine.**—Ammonia and albumen.

**Chloroform** (by inhalation).—Drawing out the tongue and artificial respiration, ammonia by inhalation and intravenous injection, digitalis subcutaneously; oxygen inhaled.

**Copper Salts.**—Albumen, soap, tannin, lime water, oil.

**Digitalis.**—Tannin, persalts of iron. Aconite, amyl nitrite and nitro-glycerine as physiological antidotes.

**Hydrocyanic Acid.**—Cold affusion, and artificial respiration, injection of atropine subcutaneously; ammonia.

**Iodine.**—Starch followed by emetic, albumen, lime water, soap.

**Lead.**—Diluted sulphuric acid, alum, epsom salts, milk.

**Mercuric Chlorides and all Mercurials.**—Albumen (flour mixed in water or white of egg), tannin, lime water.

**Opium.**—Cold affusion, faradization, artificial respiration, atropine and caffeine subcutaneously; hot coffee.

**Phosphorus.**—Emetic of copper sulphate, old turpentine (unrectified); hydrated magnesia; transfusion. No oils or fats.

**Silver Salts.**—Common salt, albumen, tannin.

**Characteristics of Cider Vinegar.** E. A. S., Cleveland.—The chief points of distinction between cider vinegar and acetic acid or white vinegar were pointed out in a paper written a few years back by Dr. B. F. Davenport. The residue of a pure cider vinegar has certain characteristics, the principal of which are the following: It will be about three per cent. in weight, and never less than two per cent. It is always soft, viscid, of apple flavor, somewhat acid and astringent in taste. A drop of it taken up in a clean loop of platinum or of iron wire and ignited in a colorless Bunsen gas lamp flame imparts to it the pale lilac color of a pure potash salt, without any yellow due to sodium being visible. The ignited residue left in the loop of wire will be a fusible bead of quite a good size, and it will leave a strong alkaline reaction upon moistened test paper, effervescing briskly when immersed in an acid. The presence in a vinegar of the slightest trace of any free mineral acid will prevent the ignited

residue having any alkaline reaction, or effervescing with acids. The presence of any practical amount of commercial acetic acid added to "tone up" the strength of the vinegar, will cause the igniting residue to impart another color to the Bunsen flame, and the residue itself will have a smoky, pyroligneous taste or odor. Any corn glucose used in the vinegar will cause its residue when ignited to emit the characteristic odor of burning corn; and as the last spark glows through the carbonized mass, to usually emit the familiar garlic odor of arsenic. The presence of any acrid vegetable substance in a vinegar is known by the residue having a pungent taste, especially if before the evaporation the vinegar has been exactly neutralized with soda.

## Miscellaneous Formulas.

### FOR ARTICULAR RHEUMATISM.

[Dr. BOURGET, *Repertoire de Pharm.*]

|                           |                       |
|---------------------------|-----------------------|
| Salicylic acid.....       | 10 grammes (154 grs.) |
| Lanolin.....              | 10 grammes (154 grs.) |
| Spirit of turpentine..... | 10 grammes (154 grs.) |
| Simple ointment.....      | 80 grammes (20½ 3)    |

Apply over the affected joints.

### FOR REMOVING FRECKLES.

[Dr. R. B. MORISON, *Am. Dermatological Society.*]

|                          |          |
|--------------------------|----------|
| Corrosive sublimate..... | gr. viij |
| Distilled water.....     | vj       |
| Spirit of camphor.....   | ss       |
| Rose water.....          | 3 v      |

Three or four thicknesses of linen, cut to cover the seat of freckles, are moistened with the solution and placed upon the face at night until they dry, when they are taken off. Whatever remains on the skin is left there till morning and then washed off. After a few nights' application the face becomes red and the epidermis begins to peel off in fine scales. Then an ointment is used night and morning, the application being made by gently rubbing it over the face for five minutes at a time with a clean finger.

### ORANGE BITTERS.

|                       |         |
|-----------------------|---------|
| Gentian root.....     | ¼ oz.   |
| Chiretta.....         | ¼ oz.   |
| Cusparia.....         | ¼ oz.   |
| Ginger.....           | ¼ oz.   |
| Fresh lemon peel..... | ¼ oz.   |
| Orange wine.....      | 2 pints |

Macerate ten days and filter.

### STOMACHIC BITTERS.

|                         |             |
|-------------------------|-------------|
| Gentian root.....       | 4 ozs.      |
| Bitter orange peel..... | 3 ozs.      |
| Chiretta.....           | 1 oz.       |
| Serpentary root.....    | 1 oz.       |
| Quassia.....            | 1 oz.       |
| Cloves.....             | ½ oz.       |
| Red sandalwood.....     | 3 drms.     |
| Glycerin.....           | 60 fl. ozs. |
| Proof spirit.....       | 6 pints.    |

Crush all the solids to coarse powder. Macerate for 10 days, and filter.

For sticking glass labels on drawers, the best cement to use is a thick solution of shellac in benzole, in which gutta percha in the proportion of 1 in 12 has been dissolved.

## Electroplating Formulas.

[Von PFANNHAUSER.—*Chemiker Zeitung.*]

### GOLD BATH.

|                        |             |
|------------------------|-------------|
| Gold chloride.....     | 25 grammes  |
| Potassium cyanide..... | 150 grammes |
| Water.....             | 1 liter     |

For anodes use platinum plates, or they may be replaced with advantage by tinned iron plates 3 to 5 millimeters thick.

### SILVER BATH.

|                        |             |
|------------------------|-------------|
| Silver cyanide.....    | 310 grammes |
| Potassium cyanide..... | 170 grammes |
| Water.....             | 10 liters   |
| Silver chloride.....   | 330 grammes |
| Potassium cyanide..... | 450 grammes |
| Water.....             | 10 liters   |

Hang the silver plates on strong steel wires. Lead, zinc and iron articles must, before silvering, first be coated with copper in an alkaline bath and then suspended in a silver nitrate bath.

### COPPER BATH.

|                                 |             |
|---------------------------------|-------------|
| Potassio cupric cyanide.....    | 809 grammes |
| Potassium cyanide.....          | 20 grammes  |
| Ammonium chloride.....          | 20 grammes  |
| Anhydrous sodium carbonate..... | 10 grammes  |
| Water.....                      | 1 liter     |

Work the bath at a temperature of 20 to 25° C., with a current of three volts at a strength of 0.5 amperes.

### BRASS BATH.

|                              |             |
|------------------------------|-------------|
| Potassio-cupric cyanide..... | 40 grammes  |
| Potassio-zinc cyanide.....   | 409 grammes |
| Potassium cyanide.....       | 2 grammes   |
| Ammonium chloride.....       | 2 grammes   |
| Sodium carbonate.....        | 10 grammes  |
| Water.....                   | 1 liter     |

### TIN BATH.

|                         |             |
|-------------------------|-------------|
| Tin chloride, fund..... | 400 grammes |
| Soda.....               | 500 grammes |
| Potassium cyanide.....  | 100 grammes |
| Water.....              | 10 liters   |

### ANTIMONY BATH.

|                               |            |
|-------------------------------|------------|
| Sodio antimonie sulphate..... | 50 grammes |
| Water.....                    | 1 liter    |

For anodes use plates of antimony.

## Bibliography.

DIE FABRIKATION DER MINERAL UND LACKFARBEN, Enthaltend: Die einleitung zur darstellung aller künstlichen Maler und Anstreicherfarben, der Email-Russ und Metallfarben. Ein Handbuch für Fabrikanten, Farbevarrenhändler, Maler und Anstreicher, Dem Neusten Stande der Wissenschaft entsprechend dargestellt von Dr. Joseph Bersch, mit 43 Abbildung Zweite, neubearbeitete Auflage. Wien, Pest, Leipzig, A. Harteleben, Verlag 1893.\*

The contents of the work may be divided into four parts, the first being introductory in character, describing the physical and chemical characteristics of the various raw materials used and the general processes of manufacture.

The second part deals with the manufacture of the mineral colors, the pigments being grouped according to the color which they produce.

The manufacture of colors of organic origin is treated of in the third part of the work. This includes the lakes made by combining a mineral with an organic substance.

The fourth division of the work concerns itself with the examination of colors, and will prove of much practical value, as tables are well arranged, clear and intelligible.

There is also added a chapter on the trade nomenclature of the colors, which is of much interest, though scarcely so complete as it might be.

The work contains some 648 pages and is issued in paper in the uniform style of the valuable collection constituting Harteleben's Chemico-Technical Library, of which it is a worthy number.

\* The Manufacture of the Mineral and Lake Colors—A Hand-book for manufacturers and dealers in paints, painters, etc. Second revised edition, with 43 illustrations by Dr. Joseph Bersch, Vienna, Pest, Leipzig. Published by A. Harteleben, 1893.

(Written for the American Druggist and Pharmaceutical Record.)

## TIPS ON ADVERTISING. XIII.

BY WM. HALLEY,  
Chicopee Falls, Mass.

In this outline I shall take it for granted that the store is in good shape, with modern improvements, that it contains a good stock, and is well manned with competent, interested clerks. A large part of the advertising should be done by the clerks over the counter and many of the home-made preparations should be advertised among the doctors by calling attention to them and giving them samples to test as they see fit. This part of the advertising I shall not consider, but confine my attention to that part of the business which falls under the head of printed matter.

Every store should make its prescription trade its main advertisement; either directly or indirectly, it should be continually pushed to the front. Next should come home preparations and articles of materia medica. Following these should be druggists' sundries and any other line of goods the store may carry in stock, such as stationery, paints, oils, etc.

The prices of patent or secret remedies are so universally cut that there is no pleasure or profit in pushing them beyond the distribution of such printed matter as the proprietors may furnish. The conditions surrounding the sale of liquors are so peculiar that unless one wishes to run a "gin mill" he can advertise them all that is necessary by personal solicitation over the counter.

The bulk of printed advertising should be carried out along three lines, their importance being in the order mentioned. First, circulars and fliers; second, newspapers, and third, placards for windows, fences or walls.

In localities where a good local newspaper is thoroughly distributed that is always the best medium of reaching the public, but this is so seldom the case that in general a booklet or circular once a month supplemented by a flier once a week is the most satisfactory way.

In the booklet I would use a good quality of paper, clear plain type and but little display, depending principally upon the subject matter to interest the people. Fully one-half of the matter should be of an educational type bearing directly on the business. For instance a comparison of the drug business, with business of other kinds; a sketch of some article used giving an outline of its history, its properties, and the process of preparing it for use; the position of U. S. P. preparations *vs.* secret remedies; poisons and their antidotes, etc., etc. The amount of such matter is almost without limit. The public as a rule are very ignorant concerning the surroundings of the druggist, and very curious; a little educational matter of this kind would increase their interest, and lead them into the way of buying a better class of goods.


Advertise the doctor; not the individual, but the profession. The interests of the doctor and the store lie side by side; a word fitly spoken may mean dollars for both which otherwise would be wasted on nostrums.

Fill an occasional page on what to do in emergencies, or curious items and funny things that happen in the store, only have everything point toward the business.

When the stock in trade is advertised, speak of only one thing or one line of goods on a page. Don't attempt to run in the whole stock. People already know of the general assortment, and it is the talk about the single article that attracts their attention.

I would make the size of the booklet about 6 by 3½

inches, with eight or twelve pages of reading matter, and, if not too expensive, eight pages for memoranda, ruled with a space for each day of the month, the latter alternating with the former. On the first page of the cover print the calendar of the month and the name of the firm in black; the balance of the outside of the cover to be covered with some small geometrical figure printed in red. On the first page of the book proper have the almanac for the month, *i. e.*, the astronomical calculations, the balance of the matter as one's fancy suggests, with not more than four or five pages of advertisements proper.



**A POINT TO BE OBSERVED**

Is the point of a-tack. Guard the point of attack and you won't get sick.

In Winter throat, nose and lungs are to be guarded. Do this by putting on a little extra clothing, both inside and outside the skin. The tailor or dressmaker will furnish the clothing for the outside of the skin. The clothing worn below the skin is fat. The best fat producer is cod liver oil in some shape. We have it in all shapes.

Plain Pure Norwegian Cod Liver Oil.  
Emulsion of Pure Norwegian Cod Liver Oil.  
Wine of Pure Norwegian Cod Liver Oil.

Then we have chest protectors—the best and at low prices.

If in spite of these precautions you do get sick, we put up prescriptions—promptly, carefully, accurately.

**JOHN BENNETT & SONS,**  
Prescription Druggists,  
WINDSOR, N. Y.

These booklets should be supplemented by a flier every week, or an advertisement in the local paper. In each of these I will speak of only one thing, and that usually the thing being pushed in the store, whether new goods, old goods, or some home-made preparation.

Use a good quality of paper—it does not pay to be stingy in this—good clear type and not much display. Print sometimes, on the back of some pretty picture card, some game or puzzle. Study variety, so that when people see your name on a flier they will take some pains to satisfy their curiosity. Don't make the flier too long; describe the article in simple terms, and the advantages it has over others, so that the

reader, if he ever wants the article described, will at once think of it and the advertiser in the same connection. At the foot of every flier, in small type or italics, draw attention to the prescription work in some short sentence, changing every time.

For newspaper work I think it would pay the advertiser to own two or more fonts of type of a different style from any used in the paper. One of 18 point for the title and one of 12 point for the body of the advertisement. This would give a distinct character to the advertisement, attract attention, and not add much to the expense.

A four inch space gives room enough for a good advertisement, and is as much as a majority of druggists would care to use. I should prefer to have it set up at least half of the time as a two inch double space.



... A ...  
**CHINA**  
MUG.

Would be a nice Christmas present to give to the children, though they wouldn't want such a tough one as this.

I have a lot of much handsomer ones, besides a number of taking little presents for the holiday season—per-

fumes, sachets, toilet articles, cologne bottles, dressing cases, etc.

Come and look at them even if you don't want to buy.

I've also got the flavorings for the Christmas cakes, the thyme and sage for the turkey, and then the medicine that you need afterward—pepsin, pills, etc.

Drugs, . . .  
Toilet Articles  
and Fancy Goods.

**JOHN POTTER,**  
**HELENA, MONT.**

Should the matter nearly fill the space put a border around it, one of unique design and your own. If the matter is scant set it up nearly solid in the middle of the space without a border. If the printer uses his own type have as many changes as possible, thereby getting people to watch for the next one. Occasionally put in an advertisement that will require quite a variety of type, but generally use only two or three.

Change every week, presenting whatever you are pushing in the store, and a good plan is to have some special thing to call attention to every week. People may buy or not, but they will not forget where they can get such an article when they or their friends need it.

Brevity is not only the soul of wit, but it is also the soul of the advertising placard. Its mission is different

from the ordinary advertisement; its object is simply to call attention, not to educate or explain advantages. Few words should be used, and these should be odd in arrangement, expression or idea, so as to catch the eye and then the thought of the passer by. Perhaps the most effective style at present is some simple statement printed with 48 point Roman or similar type on plain white cardboard, with a wide margin on all sides, and no ornaments. This is odd, because nearly all placards at the present time abound in ornamental display. This style of advertising, owing to its limited circulation and its expense, is the least profitable for the druggist, yet there is no doubt that if properly done it will amply pay for all expenses.

In all advertising strive to gain the attention of the public by telling them something about the drug business that will interest them, and at the same time set them to thinking about it in the right way; then tell them the story of a part of the stock in trade *as it is* without exaggeration, just as you would tell them orally, and the seed will be sown that will bring you good fruit afterward in a hundred different ways that you do not suspect.

Make your advertisements truthful—as good as your bond.

Don't exaggerate.

Don't abuse your competitors. You do when you claim that his goods are inferior to yours.

Excite curiosity, and don't satisfy it till you get people into your store.

Push the goods you make the most on; that is, if the goods are worth pushing.

Show the difference between the drug business and every other, and why the price of professional labor should be added to the cost of goods.

Few druggists have the time, ability or inclination to prepare a monthly circular, and here is the opportunity of the advertising expert or publisher. If some one would do a little canvassing among the retail druggists, he could probably get at least one druggist in each locality that would be willing to make a trial of the plan. Such a circular could be prepared that would do for any druggist to use by simply changing the names of firm and place. This would greatly reduce the cost and bring it within the reach of any enterprising druggist, who could supplement it by weekly circulars or advertisements of his own. The one objection to this would be that two druggists in the same locality would be unwilling to use the same advertising matter.

Another way and perhaps a better one if once successfully started, would be for the druggist associations to prepare the monthly booklets, and furnish them to such of their members as wished for them at about the cost. This would give them an air of authority, and place the matter in such a way that every member could use them without any feeling of jealousy.

The true and only way to fight the cutter is to meet him on his own ground. Sell the patents and secret remedies for the same price as he does, and push the legitimate goods of the trade by advertising with the same skill and persistency shown by the proprietors. The cutters don't cut for fun, but for an advertisement, and when you meet their prices, and stop their cry of selling cheaper than the cut-throat druggist, you take the wind from their sails, and they will soon leave the field to whom it belongs. If druggist associations would give up the annual—impossible—plans of combining the retail druggists and the manufacturers and adopt some scheme to furnish advertising matter to their members they would be taking a long step in the direction of the legitimate business methods of the age.

# News and Notes.

## Gotham Gossip.

Out-of-town druggists have little conception of the great expense to which metropolitan pharmacists go in the matter of holiday displays. I dropped into Richard Hudnut's bijou pharmacy on Broadway near 23d street the other day and was shown around the premises by his courteous manager, A. W. Stewart. The latter showed me sachets and sachet powders, atomizers, burning essences and perfume burners, the last mentioned being the latest metropolitan fad. The display of sachets is worthy of special comment, being a most unique one. First I was shown a series of historical sachets illustrating the different epochs of French history, beginning with the reign of Francis I. and ending with the Empire. Each sachet bears on its face the heraldic crest of the reigning family of the period, and is a marvel of artistic needle work. The body of the sachet, which is double, is composed of fine satin, and the heraldic design is traced in silken thread beautifully embroidered, the whole being bordered with gold or silver wire according to the general design. Mr. Hudnut has in his possession a sachet which was made expressly for the Empress of Russia. Some rule of court etiquette forbade her accepting the gift, and Mr. Hudnut with characteristic enterprise secured it for exhibition. It is a massive affair in brilliant satin, about as large as an ordinary chair cushion and of a deep orange color. The royal arms of Russia (consisting of a double headed eagle bearing the usual emblems and having as a centerpiece the figure of St. George in the act of slaying the dragon) are embroidered on the front of the sachet in threads of gold, silver and silk, the whole standing out in clear relief. The selling price of this sachet is placed at \$175. The display of perfume burners is most attractive. These articles are made of cut glass and Russian enamel of the period of the Byzantine Empire and retail from \$25 to \$75, according to style.

The item below taken from the *Sun* was handed to me last week and instanced as a suggestion which drug clerks might act upon with advantage both to themselves and employers.

"Did you notice," said a shopper, "that the clerk called me by my name? I never traded with him but once before, but he remembers my name and addresses me by it just as though I were somebody. Do you know that that always pleases me greatly?"

W. J. Quencer, of the Windermere Pharmacy, 400 West 57th street, appears to be doing a prosperous business despite the financial stringency. Mr. Quencer believes in putting his money into stock, and as a consequence the "Windermere" has a well furnished appearance and this impresses customers favorably. He is advertising hot soda to great advantage at present and has utilized an invention of his own for dispensing this seasonable beverage. The apparatus consists of a hot soda urn of the Fox, Fultze & Webster pattern which is connected with the hot water system of the building in such a way as to insure a constant supply of hot water without the aid of gas or other fuel.

The competition for the post of apothecary on the *Nichteroy* (formerly *El Cia*) which left New York last Tuesday to fight

the Brazilian insurgents, was quite keen. The successful candidate is a graduate of the class of '87 of the New York College of Pharmacy, Rudolph E. Wilhelme. He was at one time in the employment of Chas. Cunz, of this city, but during the past five years had conducted a pharmacy under his own name at Newark, N. J., where his parents reside. Wilhelme was born in Dühring, Germany, and was brought to this country by his parents when eighteen months old. He served as hospital steward in the 1st Newark Regiment of the National Guard for seven years and his adventurous spirit has been often a cause of anxiety to his father and mother.

Prof. J. A. Koch, dean of the Pittsburgh College of Pharmacy, was in town Friday and Saturday of last week. He is full of his college work, and claims that the Pittsburgh College is drawing increased attention and more students yearly. Prof. Koch is lately also interested in a new manufacturing concern, utilizing waste material from some of the Pittsburgh factories for making copperas. It was his interest in this concern that brought him here on business.

F. W. Fink, senior member of the firm of Lehn & Fink, has been away on a pleasure trip, taking in Chicago, World's Fair, Yellowstone Park, various cities in Washington, Oregon and other Pacific States, San Francisco and other towns in California, and Yosemite Valley. He is now on his way home; advices to date locate him at Salt Lake City. He will eat his turkey at home on Thanksgiving day.

Mr. Durkee, of Kelley & Durkee, prominent pharmacists of Boston, was in the city last week; also the brothers C. H. and H. A. Lawton, of New Bedford.

## Boston Budget.

Andrew Blume is located at 142 High street.

Albert C. Smith has just been re-nominated for the common council.

John G. Godding, Ph.G., has added a Low Art Tile Co. hot-soda apparatus to the equipment of his store.

Dean, Foster & Co. have recently lost large quantities of goods by the handiwork of thieves. The arrest of the offenders has put a stop to this leakage.

Daniel J. Kiley, the new proprietor of the "Oxnard Pharmacy," South Boston, is putting that store through a course of house cleaning and repainting, which will greatly improve its appearance.

Boston is proud of her representation upon two of the large pharmaceutical organizations. Messrs. Canning and Patch are the right men in the right places, and their official reign in their respective capacities cannot fail to be creditable to the Hub.

Hon. Gorham D. Gilman, of Gilman Bros., long a resident of the Hawaiian Islands, and having at the present time extensive interests there, is regarded as an authority upon the many tangled problems pertaining to the affairs of the Hawaiian government, and his opinion is frequently sought upon questions relating thereto. Mr. Gilman does not look with approval upon the attitude of Secretary Gresham, and holds that his policy is shaped entirely upon the report of one man.

David R. O'Lalor, corner of Tremont and Chapman streets, is one of the most popular candidates for nomination to the common council in the 16th Ward. For some years prior to moving to the South End, Mr. O'Lalor was with Gilman Bros., wholesale druggists.

The next meeting of the Boston Druggists' Association will be held at Young's Hotel on Nov. 28, and President Davidson has decided that it shall be a "home talent" night. Prof. James F. Babcock has volunteered to give a talk on "Pen, Ink, and Paper," and the admirers of this talented gentleman will be out in force to listen to one of his best lectures. Some surprises may be furnished and a jolly evening is anticipated.

The office of the Board of Registration in Pharmacy is open on Tuesday and Wednesday of each week, with President M. Whitney in attendance. This is an innovation which the increased duties of the board rendered necessary. An examination of 42 candidates was held last week and certificates were granted to John J. Kennedy, Hopkinton; Randall LeBeau, Fall River; George W. Walker, Boston; Michael J. O'Connor, Boston; John T. Granger, Lynn; Gustave Desy, Claremont, N. H.; Hubert J. Turcotte, Boston; Jennie H. Sumner, Uxbridge; Walter A. DeWire, Medway; Paul H. Boire, Manchester, N. H. The next examination will probably be held on Dec. 5, 6 and 7.

A recent issue of one of our daily papers gave a detailed account of the "A. P. A." (American Protective Association), an anti-Catholic organization, and alleged that Charles G. Butler was a member of the Chelsea branch of that order, and that, in consequence of his membership, his business became so poor that he was compelled to abandon the branch store which he ran in that city. This report was not only unjust, but erroneous. The facts are that Mr. Butler never belonged to the "A. P. A." and was not aware of its existence. Mr. Butler has been established in the drug business on Bunker Hill street, Charlestown, for over six years, and the Chelsea branch which he was endeavoring to establish was abandoned solely through failure to secure a competent manager. When Mr. Butler gave up the Chelsea business, he moved the stock and fixtures to Charlestown Neck, and he now has two successful stores in that district.

Michael Toole, who, with his brother Stephen, was recently arrested and charged with the murder of his mother and sister by poisoning with cyanide of potassium, has been discharged. Toole was a clerk for Carter, Carter & Kilham up to January last, and the deadly drug which caused the trouble was obtained later from that firm by purchase. Stephen is still under arrest pending the investigation of the authorities as to how the vehicle (porter), came to be contaminated with a large quantity of the poison. This case is a sad illustration of the careless manner with which members of the laity sometimes handle substances of the most poisonous character. The poison in question, although properly labeled when sold, was treated as though its properties were most harmless when it reached the home of the Tooles, and the consequences which followed should be a lasting example of the folly of this course.

**Massachusetts Matters.**

Frederick P. Lovell, M. C. P., '84, recently in business in Woburn, has decided to locate in Newport, N. H.

Fred Ladd, who has opened a new store at Gloucester, was formerly a clerk in St. Johnsbury, Vt.

C. H. Snow, the Belchertown druggist, has arranged the space in his new store to such good effect that it is a model of order and neatness. He has just received his new prescription bottles and is now as well equipped as before the fire.

J. A. Crane, of Clinton, has sold his High street store to W. F. Heagney and John H. Chadwick, who take possession Monday.

Extensive alterations and improvements are being made at J. G. Burque's drug store on Essex street, Haverhill, and the office is being entirely remodeled.

J. L. Towne, formerly proprietor of the drug store at the corner of Summer and Shepard streets, Lynn, and afterward connected with the shoe firm of Jones, Curtis & Towne, has opened a drug store at the corner of Boston and Federal streets.

**Michigan Mention.**

W. H. Burk recently lost his mother by death at Ann Arbor.

Williams, Davis, Brooks & Co. will be at home in their new building on Congress street, Detroit, in about ten days. Farrand, Williams & Clark will occupy the stores now being vacated by them.

J. J. Haarer & Co. have sold their drug stock at 222 Myrtle street, Detroit, to F. J. Ducat, a medical student, who will continue the business.

James Labelle & Co., druggists in Windsor, Ont., just across the river from Detroit, have opened a branch store on Glengarry avenue.

Hageman's drug store at Birmingham was broken into on the night of Nov. 10. Only a few articles were taken, as the robbers were frightened away.

Edward Vought, one of Escanaba's leading druggists, assigned Nov. 15. His liabilities and assets are not known.

The Anderson Mfg. Co., of Detroit, manufacturers of bicycles and druggists' apparatus, were burned out last week with a loss of \$6,000 above insurance. Beck & Knight, bookbinders, were also burned out. T. H. Hinchman, wholesale druggist, had just left his new catalogue with them, which was destroyed.

M. W. Gridley, who was recently arrested in New York for forgery, obtained a considerable sum of money from Stevens & Todd, Detroit, druggists.

Dr. C. L. Howell has disposed of his interest in the drug store of Harris & Howell, of Flint, to F. H. Thompson of Manistique. Bagley Harris, the doctor's partner, still retains his interest in the store. Mr. Thompson is a practical druggist and is said to be a man who makes friends readily. Dr. Howell will continue in his old office and attend to patients as usual.

**Southern Siftings.**

Battles Bros., of Hot Springs, Ark., are about to reopen a store with the stock formerly belonging to Dr. Kelly.

The drug store of W. H. Glasscock in Louisville, Ky., was entered by burglars and a small amount of stock taken.

L. P. Miller's store in Pembroke, Ky., comes in for a very favorable notice in the Hopkinsville, Ky., *New Era* of recent date.

Bismarck W. Petsche, of Louisville, Ky., has accepted a position with the Arlington Chemical Co., of Yonkers, N. Y.

Charles P. Frick, manager of the cigar department of the Robinson-Pettet Co. Louisville, reports business improving. Druggists throughout the city and State are ordering in larger quantities. He attributes the revival of business to the closing of the World's Fair.

J. P. Ward, for a number of years past the able and efficient chemist and manager of the laboratory department of H. W. Williams & Co., of Fort Worth, Texas, was married on Wednesday, November 8, to Miss Jessie, daughter of Mr. and Mrs. C. H. Ehringer, at Navasota, Texas. Both the bride and groom have great and deserved social popularity and have been the recipients of many hearty congratulations.

Thos. J. Dewberry, formerly of Lasca, Tenn., has now located in Centreville in that State.

The pharmacy at Asbury Park, N. J., conducted recently by a Mr. Coward, and formerly owned by Henry Williams has been purchased by E. E. Saunders & Co.

Edward J. Richards, who for several years was head clerk in a Front street, Plainfield, N. J., pharmacy, has started a drug store of his own on West Fourth street, at the corner of Liberty street, Plainfield. He calls his new possession "The Gem Pharmacy."

**Kings County Pharmaceutical Society.**

At the November meeting routine business was postponed until after the reading by Dr. D. C. Mangan of an interesting paper upon poisons viewed particularly from the standpoint of the pharmacist. A rapid sketch was given showing the ages during which many have been known, and a strong point brought out of the accuracy of description given by Plato, of the signs of conium poisoning upon his friend Socrates when killed by the Athenians. Dr. Mangan recommended for convenience the employment by druggists of a new classification of poisons: First, two grand divisions, poisons from inorganic sources and poisons from organic sources, instead of the lengthy tables as used by doctors where exceptions are greater than the rule.

It was elicited that the inorganic heading will be found to include nearly all of the corrosives and irritants, all acting upon the upper alimentary canal, easily arranged into comparatively few sub-classes having similar antidotes, as mineral acids, alkalies, silver salts, arsenic salts, antimony salts, mercury salts, etc., while the organic list would include the ordinary classification into irritants all acting mainly upon other points than the oesophagus or stomach—excito-irritants and narcotics. Diagnostic methods were given for ready use in determining the sub-classes, as they are likely to be met in accident cases, and many convenient hints given.

He said that the regulation rule was to

tell the family or patient to send for a doctor, which was proper, but ordinarily the druggist was called upon first, and often minutes stood for life or death. One great difficulty of obtaining medical aid in a hurry lay in the fact that at certain hours of the day a dozen blocks might be covered and every physician's office found vacant.

The discussion following brought out from Wm. P. DeForest and L. F. Stevens a hearty recommendation of the two divisions advocated by the speaker. Mr. DeForest had an experience with sulphuric acid which was swallowed in place of lithia water. Mr. Stevens of two teaspoonfuls of tincture of aconite by mistake for a cough mixture. Mr. Werner had delivered some camphorated oil upon request, of which enough was swallowed a few hours later to give a dose of 140 or 150 grains of camphor. A vivid description was given of the frenzy of intoxication which followed. The chairman (Dr. Brundage) had taken too much strychnine once upon a time and received an object lesson. Mr. Perkins had some time ago given out Paris green for water bugs; the housekeeper, obtaining it, dusted the kitchen wall, and then the next morning swept it all up with the same care, and was sick for a long time after from the effects of the powder inhaled.

Dr. Golding cited several instances where Paris green had not caused pain or vomiting, and this led to overlooking that as a possibility until it was found by post mortem. Many other reminiscences were stirred up also during the course of the afternoon talk.

**Boards and Colleges.**

THE MICHIGAN BOARD OF PHARMACY concluded the examination of candidates for pharmacists' and assistant pharmacists' certificates on November 10. There were 120 applicants, of whom 37 passed the required examination and will receive pharmacists' certificates; 52 will receive assistants' certificates, and 31 failed to pass. The following named persons received certificates as registered pharmacists:

H. Biddlecomb, Detroit; J. C. Brockman, Bettsville, O.; H. V. Euell, Malvern, O.; S. D. Collins, Hart; J. J. Fitzgerald, Hart; F. W. Gallagher, Racine, O.; C. S. Gibson, Batesville, O.; J. H. Goodhue, Detroit; T. D. Harris, Owosso; H. Heffeblower, Detroit; F. H. Joyce, Detroit; M. E. Keyes, Morenci; F. K. Kincaid, Hersey; J. S. Kerchner, Detroit; F. M. Klussman, Ada, O.; W. B. Knapp, Grand Rapids; W. H. Lamb, Ada, O.; F. J. Lane, Detroit; J. D. Lober, Jerusalem, O.; N. T. McLean, Chatham, Ont.; G. Martin, Litchfield; D. C. Mohler, Carleton, O.; H. A. McKenna, Yale; H. J. Neville, Green Bay, Wis.; H. W. Packert, Detroit; B. J. Palver, Ypsilanti; T. M. Richardson, Windsor, Ont.; E. J. Riordan, Sault Ste. Marie; R. D. Rowley, Ypsilanti; W. A. Rudell, Sault Ste. Marie; C. E. Shindler, New Corydon, O.; C. Schriber, Moravia, O.; E. D. Taylor, Ozark, O.; H. J. Thompson, Manchester, O.; J. H. Vold, Pigeon Falls, Wis.; E. A. Webb, Casenovia; C. E. Woolley, Brown City.

Assistant pharmacists—H. Agnes, Ottawa, O.; R. S. Armstrong, Chelsea; E. Bassett, Grand Rapids; J. C. Belcher, Windsor, Ont.; H. C. Blair, Leslie; Florence Burch, Adair; George J. Buss, Detroit; H. W. Cadwell, Detroit; F. B. Chadwell, Detroit; E. M. Clapp, Oshtemo; M. E. Cooper, Jackson; P. J. DePree, Grand Rapids; E. Eastman, Detroit; B. C. Fish, Edwardsburg; C. E. Foster, Webberville; J. M. Freeman, St. Charles; A. E. Fulcr, Richmond; Sama Gallagher, Saginaw; G. G. Gardner, North Star; G. W. Gankell, Bay City; M. E. Gibson, Lansing; R. Goodfellow, Clio; F. J. Greene, Detroit; F. W. Hamilton, St. Charles; I. M. Hines, Ada, O.; C. O. Hubbell, Jackson; N. E. Leighton, Kalamazoo; W. F. Launt, Kalkaska; L. O. Loveland, Charlotte; G. J. Menold, Luther; E. L. Moore, Melvin; J. Murray, Merrill; F. L. Meelin, Charlotte; G. H. McGillivray, Muir; J. M. Mc

Gregor, Ann Arbor; J. A. McOmber, Hastings; A. McWala, Fenton; C. Niendorf, Colon; E. E. Ormsby, Clio; C. H. Patterson, St. John's; W. J. Reid, Port Huron; J. H. Scott, Carland, O.; L. C. Smith, West Branch; V. Homar, Fowlerville; L. P. Vogel, Chelsea; E. Wallace, Detroit; F. W. Witthelm, Bay City; P. Whitmore, South Haven; W. D. Hammond, Au Sable; R. H. Leece, Munith; W. B. Winthorpe, Oscoda; F. G. Thatcher, Nashville.

The next meeting of the board for the examination of candidates will be held at Saginaw on the second Tuesday of January, 1894.

The board adopted a resolution requiring all applicants for examination in the future, as registered pharmacists, to have had at least three years' actual experience in a drug store where physicians' prescriptions are compounded; and applicants for certificates as registered assistants must have had two years' actual experience. One month in a college of pharmacy will be counted as two months' experience in a store, provided the applicants have had at least four months' actual experience in a drug store under the supervision of a registered pharmacist. This resolution will not affect applications now on file with the board, upon which applicants are still entitled to examination.

MASSACHUSETTS COLLEGE OF PHARMACY has organized a course of twenty exercises in medical pharmacy which will be given at the college on Thursday evenings, beginning November 23, 1893, provided ten or more students apply for it. This course has been devised and arranged especially for medical students, and will consist of brief lectures and demonstrations, followed by exercises in the pharmaceutical laboratory, at which the student will prepare types of the various medicinal preparations, the whole to occupy two or three hours per evening, at least three-fourths of which time will be spent in the laboratory. The prescription will be treated from a pharmaceutical standpoint, and will include such operations and demonstrations as will familiarize the student with the appearance and physical properties of the more important remedies and preparations, the best methods of preparing and combining them, their limitations, incompatibilities, etc., and will thus enable the prescriber to more intelligently combine or disguise remedies for administration, and to judge of the chemical or pharmaceutical value of preparations offered by manufacturers or others. The fee for the course is \$25.

THE DELAWARE STATE BOARD OF PHARMACY held its annual meeting on November 9, at Dover. The full board, consisting of Dr. W. H. Cooper, Clarence D. Sypherd, Dr. O. G. Robinson, J. Harvey Spruance and Erdman Hoffman, was in attendance. After some routine business, the following officers were re-elected: Dr. Cooper, president; Mr. Sypherd, secretary and treasurer. The board has decided to strictly enforce the law upon all persons not complying.

NEW YORK CITY BOARD OF PHARMACY.—At the last examination the following passed:

Geo E. Crosby, Frederick Engel, Salomon Mogilewich, Samuel Wexler, Joseph Kahn, Abr. Benjamin and Geo. C. Frolich. During the month eighteen pharmacists were registered. The next examination will be held at the college on December 11, at 9 A.M.

### Candy Exposition.

Druggists will find much to interest them in the Candy Exposition now being held at Lenox Lyceum, this city. Hance Brothers & White, of Philadelphia, have a most attractive exhibit of confection specialties shown in a Japanese booth, which is, perhaps, the most distinctive booth, artistic and otherwise, in the entire exposition. Everything about it suggests Japan, from the imitation frogs made of cotton by the Japanese peasantry to the now well known "Frog in your Throat." So great an attraction has this stand been that special officers were required to keep the crowds who flocked around it in order.

Another exhibit of special interest is that of the Walter M. Lowney Co., in which is shown chocolate bon bons of the different qualities—superfine, light and dark. The firm is represented by E. W. Dunstan, of 8 College Place, New York. Hickock & Johnson, wholesale druggists, New York, exhibit an extensive assortment of confectioners' colors, as well as essential oils, extracts, spices and general confectionery supplies. Wood & Selick, 36 and 38 Hudson street, New York, have an attractive display of fine confectionery, colors and essential oils. One of the attendants at this exhibit who was asked if the colors exhibited were of mineral origin replied: "I guess they are mineral colors, for if they were artificial, they would be poisonous, you know!" The Crown Cordial and Extract Co. was represented at the exposition by one of its most genial salesmen, R. F. Allison. He is, perhaps, the best known salesman on the road and will certainly bear the palm as the jolliest. The exposition authorities owe him more than an acknowledgment for his many services in the interest of visitors.

### The Scates Plan.

The Scates Medical Co., of Westbrook, Me., are introducing their remedies through the assistance of the druggists in a novel way, and in a way that makes it interesting to druggists.

The stock of the company is divided into preferred and common shares of \$10 each. The common stock is entitled to one-quarter of the profits, and is set aside to be used as follows:

Each druggist ordering for the first time goods to the amount of \$10 or more, receives an amount of stock equal to his purchase free. If the order is \$10, he receives one share, \$20 two shares, and so on. This stock is non-assessable.

Did you ever stop to think that your influence behind the counter was worth so much cold cash to the manufacturer? This is a fact, and why should you not be paid for it?

They state that their stock is already earning a dividend, and as their sales increase their dividend will increase materially, and add very much to the par value of the stock. They claim to have the goods, the style, the scheme to make them sell, and they want the assistance of live druggists.

The directors of this company are Hon. Fred. E. Richards, Hon. Leander Valentine, Russell D. Woodman, Lemuel Lane, N. A. Brown and J. C. Scates.

Mr. Scates, the manager, has been in the drug trade in Westbrook for nearly twenty years, is an experienced and com-

petent pharmacist, and is highly recommended by the wholesale druggists of Portland. Their specialties are Vi-tal-ized Tonic, Lax-ive and Tea Pills.

They do not claim to stock up a druggist with a lot of the goods and leave it entirely with him to sell them, but they co-operate with each druggist or agent by sending circulars direct to customers whose names are furnished by the druggist. In these circulars they inclose a card which is good for a sample on presentation to the druggist whose name is specified on the card.

Mr. Scates being a druggist himself fully appreciates the assistance that the druggists can render in selling prize goods and instead of spending large sums of money in advertising to the public, they propose to share that money with such druggists as will take hold of their goods and push them. Their plan is certainly well planned, and it has every evidence of sincerity, backed by men of integrity and financial responsibility, and from a personal call upon this concern we recommend our readers to correspond with them with a view to accepting agencies.

### A Profitable Line.

In these times of cut prices it is a great joy to find something that is not cut. The truss business has so far generally escaped the slaughter, and consequently there is money to be made in handling them, if you handle the right kind. The "Champion" is the right kind, and the Philadelphia Truss Co., P. O. Box 1207, can give you some valuable pointers on how to handle the truss business so as to make it profitable, if you will mention the AMERICAN DRUGGIST when writing them.

### A Tablet Machine for a Dollar and a Half.

The trouble which the tablet triturate people are making for the drug trade can be obviated by "making them yourself." Heretofore this has been impracticable on account of the expense of machinery. This difficulty is surmounted by the cheapness of the machines of the American Triturate Mold Co., 1130 South Twelfth street, Philadelphia Pa. Write them for free descriptive circular, mentioning this paper.

### Dead Stock.

How to get rid of dead stock is a very important problem to solve, particularly at this season. What is dead stock in one section may be very good stock in another if the druggist only knew where that was. This knowledge can be had by applying to Ashton M. Boney, 28 Gold street, New York city. He makes a business of buying and selling all lines of goods. When writing mention this journal.

### A Close Buyer.

A. Ashfield Baker, 140 William street, has a happy faculty of knowing just where to get the finest thing in druggists' sundries at the lowest prices. He gives his customers the benefit of this knowledge, and this without any expense to them. Do you need any pill boxes, tooth brushes, fancy holiday goods? Inquire of him what he can do for you, and when doing it say we suggested it.

# American Druggist and Pharmaceutical Record.

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WHOLE No. 275.

## AMERICAN DRUGGIST PUBLISHING COMPANY.

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A. R. ELLIOTT, PRESIDENT.

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## PROPOSED CHANGES IN THE TARIFF.

ELSEWHERE in this issue we present a table showing the more important of the changes directly affecting the drug trade in the draft of the tariff bill as submitted by the majority of the Ways and Means Committee of the House of Representatives this week. It is generally understood that the figures made public are on the lowest possible basis for the respective articles, and that any modification of the proposed bill will most likely be toward a higher rate on some specific article under pressure from interested parties.

The reduction by the committee of the import duty on alcohol from \$2.50 to \$1.80 is in accordance with the suggestion made editorially in our columns last November, and may be taken as outlining the course likely to be pursued in the matter of the internal revenue tax on alcohol. From this we may presume that the alcohol tax will probably not be raised. Another indication of this is the break which occurred in Whisky Trust stock in Wall street when the bill was made public on Monday. Under the influence of rumors that the internal revenue tax was to be raised Whisky Trust stock had sold up several points, but on Monday the price broke some four cents.

It is now reported that the deficiencies in revenue, caused by the reduction of the tariff duties, are to be made up by the taxation of shares of corporations, legacies and proprietary medicines. The officials of the Treasury Department and the Census Office are at

work preparing statistics to show the amount of revenue that can be raised from these sources.

So far as the taxation of proprietary medicines is concerned the government could scarcely select a more troublesome and annoying method of increasing the revenue nor one which allows of greater chances for bureaucratic robbery. In connection with this proposition we can merely reiterate what we said editorially last January :

Theoretically considered, the proposition has many points worthy of commendation, and under a perfect government administered by perfect men the results would, no doubt, inure to the public good. Our lawmakers, however, are far from having the wisdom necessary to draft a law imposing a stamp tax which in its operation would not be attended by injustice and a great deal of harrassment to the retail druggist. It sounds well to advocate the imposition of a "tax on quacks," and if it be possible to impose a tax on them and their nostrums alone without involving the whole drug trade from the smallest to the largest dealer then the measure has our heartiest support.

We are also in favor of the immediate advent of the millenium.

Experience is the best teacher, and all pharmacists who recall the annoyance and expense entailed upon the retailer by this tax as it was formerly levied will unite in opposing to their utmost the revival of a measure resort to which could only be justified by extreme financial straits on the part of the government.

It has been suggested that the imposition of the tax might possibly help the situation as to cut prices. The suggestion shows so impractical a view of the subject that its consideration is not worthy serious attention. The condition of the trade in England, where the stamp tax has been in operation for many years, is a good indication of how little influence the tax has on the cutting of prices.

If we are to follow English precedent let us first impose a stamp tax on legal documents, receipts, etc., taxing the whole people rather than any specific calling. The druggists have now in the twenty-five dollar tax imposed by the United States because they handle alcohol an unjust tax to pay, and they should not be saddled with another.

THE *Lancet* thinks that "the natural feminine tendency to give advice" is a strong argument against the development of women pharmacists. We scarcely think this view of woman's unfitness for work as a pharmacist will obtain with other than journals devoted to medicine and surgery. The editor of the *Lancet* appears to overlook the restraining influence of a pharmaceutical training on the proverbial loquacity of woman.

## Experiments in Changes of Color with Reagents.

In a large number of cases chemists who are making a quantitative analysis are apprised of the end of a reaction by a change of color, such change resulting from the natural affinities of the bodies in presence, or what is more frequently the case, being due to a colored reagent introduced as an auxiliary.

Such changes of color give rise to a large number of interesting experiments, a few of which, taken from the *Scientific American Supplement*, we shall describe.

**The Magic Glass of Water.**—Put a pinch of finely ground and sifted red sanders in a glass of water, and the liquid will at once assume a red color similar to that of claret. If this liquid be poured into another glass, previously rinsed with a few drops of vinegar, it will assume a beautiful tint, resembling that of brandy. If a little potassa be added to it, it will change back to its original color, and, finally, if a little alum be introduced, it will become as black as ink; so that, to a person not in the secret, it would seem as if claret, brandy and ink had been obtained from a simple glass of water.

**Water Changed into Wine.**—Place in a glass a solution of sulphocyanide of potassium of ammonium. This solution (which is very poisonous) will appear as limpid as water. Pour the liquid into another glass, in the bottom of which has been placed a minute quantity of effloresced sulphate of iron, and it will at once change to a red color.

**Wine Changed into Water.**—Dissolve 15 grains of permanganate of potash in a quart of water, and a liquid will be obtained resembling claret in color. Add to this solution 45 grains of tartaric acid.

Put into a bottle a few crystals of hyposulphite of soda and a little water and rinse a glass with the solution. If the permanganate solution be now poured into the glass, it will be instantaneously decolorized.

**Wine Changed into Milk.**—If vinegar be added to tincture of iodine, a beautiful red liquor resembling claret in appearance will be obtained. If into this we pour a solution of hyposulphite of soda, we shall obtain a milky white liquid (due to the deposition of sulphur), and a credulous spectator might be led to believe that wine had really been changed into milk.

**Water and Wine from the same Pitcher.**—Prepare some water chemically by adding to each pint 40 drops of solution of chloride of iron and a few drops of sulphuric acid. The glasses in which it is desired to have the wine-colored liquid appear are then prepared by rinsing them with a solution made in the proportion of one drachm of sulphocyanide of ammonium and one drop of tincture of nutgall. One drop of this in each glass is sufficient. When the prepared water is poured into these glasses, it is instantly changed to a wine color. This may be changed back to water color again by the addition of a solution of acetate of lead. The instantaneous changes produced seem magical.

**A Purple, Green, and Red Liquid from the same Bottle.**—Boil some leaves of red cabbage, and after half an hour's ebullition we shall have a beautiful purple liquid, which, when cold, may be put into a bottle for future use. Take three glasses. Let one be perfectly clean, in the second put a drop of ammonia, and in the third a drop of sulphuric acid. The liquid poured into the clean glass will, of course, preserve its original color, that in the second will turn green, and that in the third will become red.

If the odor of cabbage is disagreeable, the flowers of mallows, dark colored hollyhocks, or red pelargoniums may be used.

## Notes, Queries and Answers.

Under this heading we shall, to the best of our ability, endeavor to answer such questions addressed to us as come within the scope of this journal, provided they are accompanied by the name and address of the writer. Unless special instructions to the contrary accompany the query, the initials of the correspondent will be quoted at the head of each answer.

When asking for the formula of an unusual, patented or proprietary compound, always accompany the query with any information you may already possess regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, send also a specimen of the label used on packages of the compound.

**Ingluvin.**—In response to a previous inquiry we quoted a statement to the effect that ingluvin consisted of a mixture of pepsin and salt, though we had not ourselves examined the article. The manufacturers claim that it is made from the gizzards of birds and have satisfied us of the fact that they do purchase such gizzards in large quantities.

**A Question of Compatibility.**—Dr. S. R., New York, writes: Please tell me if the combination below is incompatible; also inform me as to whether the antiseptic properties of the solution are increased or diminished by the thymol.

|                          |    |         |
|--------------------------|----|---------|
| Hydrarg. chlorid corros. | ss | 0.5     |
| Sodii chlorid.           |    |         |
| Thymol.                  |    | 0.3     |
| Aque font. ad.           |    | 1.0 0.0 |

Although thymol combines with mercury to form an insoluble thymolate it is unlikely that a combination of this kind will be produced in the present instance. Combination is likely to take place slowly, however, and it is not unreasonable to suppose a gradual lessening of antiseptic properties of the solution from the slow precipitation of its active constituents.

**Prescription Difficulty.**—"Galen" requests information as to the correct interpretation of the prescription printed below:

|                              |        |
|------------------------------|--------|
| Syr. sasia                   | ℥ iii  |
| Tr. quassia                  | ℥ ¼    |
| Tr. cinchona                 | ℥ i    |
| Tr. cimic. ras.              | ℥ ss   |
| Kali iodid.                  | ℥ ii   |
| Aqua, q. s. add to make iii. | ℥ viii |
| 34.78a.                      |        |
| Decelle compound.            |        |

M. Dose, one tablespoonful 3 times a day. For weak persons reduce the dose.

We print the prescription without alteration. The first item is clearly intended for syrup of sarsaparilla, and the fourth for tincture of cimicifuga. The sixth line calls for sufficient water to make three eight ounce bottles, this last being perhaps the vaguest part of the order. The words "Decelle compound" is a fancy name for the preparation.

**Sales of Sundries on Sunday.**—"Pennsylvania" wishes to know if it is contrary to the laws of Pennsylvania for druggists in that State to sell cigars, toilet articles and soda water on Sundays, and if so what is the penalty?

Literally construed the laws of Pennsylvania prohibit the sale of the articles mentioned; but in Pennsylvania, as in other States, the practical construction of the law varies under different administrators. For more definite particulars regarding the question raised we must refer you to the law officers of the county in which you reside.

**Liq. Calcis Sacch.** (Cleland's). A Subscriber.—This is the syrup of lime of the U. S. Pharmacopœia. The name Cleland is mentioned in connection with this preparation in Dorvault's "L'Officine," the French Dispensatory. Dr. Cleland is there credited with proposing the use of a saccharate or syrup of lime in preference to plain lime water on account of the better therapeutic action of the former. In the U. S. Dispensatory his name is not mentioned.

## News and Notes.

### Gotham Gossip.

Through the courtesy of Dr. Harding I had the pleasure of witnessing an interesting little ceremony on Evacuation Day, November 25—that of unveiling a tablet commemorative of the affair of Golden Hill, in which the first blood of the Revolution was shed on January 18, 1770, some five years previous to the battle of Lexington. The tablet which is illustrated herewith was affixed to the southern wall of the building of the Humphrey Homœopathic Medicine Co., at John and William streets, by the Society of the Sons of the Revolution, a patriotic order whose aim is to foster patriotism by creating a general interest in the early history of the country. Just before ten on Saturday morning a special committee of the society, composed of Jas. H. Morgan, John J. Silcock, Henry Russell Drowne, and James R. Townshend, arrived and were shown into Dr. Harding's cosy private office, where he had been giving me an interesting account of his success in establishing their large South American trade. After the introductions were over the committee, Dr. Harding, and myself made our way to the veiled tablet which was surrounded by a crowd of curious people. The veil was removed and two brief addresses made in which the in-



cidents were narrated which the tablet is intended to commemorate, and the owners of the property, the Humphrey Medicine Co., were duly thanked for the aid extended the society in furthering its aims. Dr. Harding has carefully collated all the historical data bearing on the occurrence and printed an abstract thereof, which he will forward to any one interested in the matter. Briefly told, the story is that soldiery of Golden Hill barracks, situated near the point where the tablet now is, had on January 10, 1770, cut down the liberty pole erected by the "Sons of Liberty." In the ill-feeling between the citizens and the soldiery an edict had been promulgated prohibiting the appearing on the street after roll call with arms. A party of soldiers having disregarded this order were arrested by the citizens and later rescued by some comrades. This led to desultory fighting between the two parties lasting for two days in which several were wounded and one life lost.

Apropos of the editorial remark concerning errors in tariff legislation in last week's issue, a gentleman well known in drug circles remarked: "Yes, sir; when it comes to tariff legislation on 'Schedule A' there is no knowing what a day may bring forth. I left Washington on the night of the battle of Bull Run after watching the drafting of a tariff bill for six weeks, and

that very night the particular item that I had been watching for and which I was prepared to handle came up and was settled adversely to the best interests of the country, though the action was repealed at the next session. I remember the night particularly well because Mr. —, who had been there on the same errand, had the berth above mine in the sleeper, and his revolver fell down into my berth, though fortunately it did not go off."

Fifth avenue business is not so remunerative as it is generally cracked up to be. Hazard, Hazard & Co. have evidently experienced this for they have decided to leave that fashionable promenade and open a pharmacy in the busiest and most popular part of Broadway. The new store is located between 26th and 27th streets.

### New York State News.

L. B. Campbell has sold the stock and goodwill of his drug business at Binghamton to Cleves & Gardner of 119 Court street, that city.

Henry E. McIntire, of 2812 Fulton street, has improved his store with a coat of paint and some artistic decorations, which enhance its beauty and add to its former attractiveness.

F. T. Comstock, of the firm of A. Comstock & Son, Smyrna, N. Y., is a graduate of the N. Y. C. P. class of '89. His firm has recently purchased the stock of E. C. Billings of Smyrna, who has retired from business.

The Newman drug store on Main street, Canandaigua, has been closed by E. W. Simmons, who recently purchased the stock. As soon as the store has been refitted Mr. Simmons intends removing his old store to that stand.

The following druggists of Rochester were recently arraigned before the United States Commissioner for having failed to pay the government tax on liquors:

Louis Wyeth, No. 169 Childs street; Charles F. Maid, No. 379 Lyell avenue; Siener & Bauman, No. 362 Hudson avenue; and Max J. Weishaw, No. 751 North Clinton street.

Frederick G. Aspinall, son of W. A. Aspinall, a well-known druggist, doing business at Fulton street and Franklin avenue, Brooklyn, was married to Miss Bessie Bryer, of 84 Lexington avenue, on November 14. Fred is a member of the senior class of the Brooklyn College of Pharmacy and a popular favorite with his fellow students. They all unite in wishing him a happy married life and a successful and prosperous career.

The Flatbush police are looking for a well-dressed stranger, who, by glib talking, succeeded in swindling Druggist A. M. Klein, of Flatbush avenue, out of \$15. It was on Saturday that the swindler made his appearance. He walked into Klein's store, and represented himself as a nephew of Peter Vandever, a well-known farmer and a large property owner in the town. He said that he became financially embarrassed for a short time, as he had been seeing friends, and asked the druggist to cash his check for \$15. The druggist was only too willing to oblige a "nephew of Vandever's," and handed over the money. That evening Mr. Vandever had occasion to stop at Klein's store, and the druggist informed him of the favor he had done his

nephew. Vandever immediately became suspicious, and sent for his only nephew, Adrian Vandever, who denied asking Klein for the favor. The druggist, when he saw the nephew, said he was not the man who had secured the \$15, and then seeing that he had been defrauded, he went to the town hall and reported the case. Detective James Doherty was detailed to look for the swindler.

### Boston Budget.

Henry D. Huggan has been unanimously renominated by all parties as school committeeman.

No store in the city has a more business-like air and appearance than that of William A. Chapin, Ph.G., under U. S. Hotel. Mr. Chapin is an M.C.P. '84 man.

Henry L. Bigelow, who was recently arrested and charged with robbing N. W. Stiles, his former employer, has been tried and convicted by a jury. Bigelow had no counsel but is said to have defended himself most ably. This did not prevent his being found guilty and sentenced to three years in the house of correction.

David R. O'Lalor, of Tremont and Chapman streets, who was a candidate for the nomination to the common council, claims to have been defeated by an unfair and unjust count. Mr. O'Lalor's friends have prevailed upon him to take out nomination papers and run as an independent Democrat, and his success is predicted.

Prof. Greenleaf R. Tucker, M.C.P., was the chemist for the government in the celebrated Toole poisoning case; he testified to finding large quantities of cyanide of potassium in the porter which is said to have caused the trouble. A peculiar phase of this case is that the counsel for the defence has been besieged by people who desired to assist in its conduct.

No Boston pharmacist derives more pleasure from participating in affairs political than does Amos K. Tilden, of Ward 10, who has just received a nomination to the common council. He has long been identified with politics in the Hub, both in his own ward and in the city conventions. On numerous occasions he has had the pleasure of placing candidates in nomination for the mayoralty and for lesser offices. Mr. Tilden is a Democrat of a pronounced Jeffersonian type, and as such commands the respect of the members of all parties. He is at present a member of the Board of Registration in Pharmacy, and has for a long term of years been connected with the "City Hall Drug Store" on School street.

### Massachusetts Mention.

Charles Molter is about to open a pharmacy in the new Molter Block, at Clinton.

L. P. Kinnicutt, professor of chemistry at Worcester Polytechnic Institute, is an independent candidate for the school committee.

Edgar McConnell, aged 22 years, son of S. A. McConnell, of School street, Merri-mac, is reported to have been missing for several days.

H. C. Moynihan & Co. have opened a very attractive store in the Callahan block on Hamilton street, Southbridge. The interior is finished in quartered oak except the drawers which are made of black walnut.

Arthur Hudson, of Newton, applied for a sixth-class liquor license sometime ago, and the board of aldermen have just acted favorably upon the petition.

William Palmer, 17 years old, has been arrested on the charge of robbing the safe in L. L. Atwood's drug store, at Pittsfield, Mass. Atwood watched him and caught him just as he had taken \$13.75 from the safe.

At a recent prohibition rally in Haverhill, the speaker of the evening attacked the local druggists and claimed that they had sold more liquor this year than in the no-license period of the preceding year, but he is not reported to have backed up his statements with facts.

### Jersey News Notes.

Frank S. Githens, for some time connected with Bye's Spring Lake Pharmacy, is now with J. J. Flynn, of Mt. Holly.

Clement Kelty, druggist of Salem, who was seriously injured by a fall on the night of Nov. 7, is reported in a critical condition. But little hope is entertained for his recovery.

Ed. W. Dunn, who has been with J. F. Braddock, 3d and Birch streets, Camden, for the past year and a half, has dropped the pestle for the Winter devoting his entire time to study at the Philadelphia College of Pharmacy.

### Western Winnings.

Otto E. Betz is to have a \$3,000 set of fixtures for a new store in the Hyde Park building, Hyde Park, Cincinnati, Ohio.

The Empress Josephine Toilet Co. has been organized at Dayton with a capital of \$50,000, and with C. H. Breidenbach president, H. C. Graves, Jr., vice-president and H. Z. Marshal secretary and treasurer.

Rudolph Gems, manager of Buck & Raynor's drug store at State and Madison streets, Chicago, has fled, and his employers say he is an embezzler to the extent of \$2,000. He is said to have secured the money by means of false certificates of deposit. His wife joined him at some Indiana station on the Lake Shore Railroad after disposing of the furniture of their house, 1421 Wrightwood avenue, and together they went to Erie, Pa. Cleveland police officials boarded the train in response to a telegram from Inspector Shea, but not having time to secure a warrant were compelled to allow Gems to proceed. From Erie he went to Buffalo with his wife. Gems is of a good family in Boston and went to Chicago about five years ago. He was inclined to be wild, and his father, it is said, was driven to suicide twelve years ago in Boston on account of his son's dissolute habits.

### Nebraska Notes.

W. F. Smith has opened a new drug store at Filley.

C. J. Krickbaum, M.D., has opened up a new stock at Ceresco.

Chase Bros. contemplate putting in a new stock of drugs at Mason City.

Dr. Barnes has lately purchased the drug stock at Rogers owned by J. T. Richey.

P. W. Galer, who lately traveled for the

H. T. Clarke Drug Co. in Southeastern Nebraska, has left the road and accepted a position in the house.

J. S. Harlan is no longer connected with the drug firm of O. F. Harlan & Bro. at Spring, Neb.

Druggist B. F. Smith, of Beatrice, broke an arm by falling from a carriage while attending a funeral.

Angus Ross of Howell has sold his drug store to H. Lahef, of Petersburg. Mr. Ross intends moving to Oklahoma.

F. P. Boyden, of North Bend, has accepted a position with the new drug firm of Bridgeford and Nichols at Schuyler.

E. A. Waterman had charge of W. H. Smith's drug store at Gordon during the absence of the proprietor in the East.

At a Republican bonfire at Table Rock some miscreant tore down the sign of S. G. Wright & Co. and threw it in the fire.

Lafin and Tout of Wymore lost almost their entire stock by fire. The loss will be about \$5,000. They will re-open at once; partly insured.

J. A. Baum, prescription clerk for Deyo & Grice, the Red Cloud druggists, has returned from an eastern visit. He was accompanied by his family.

### Southern Wholesalers Adjourn Their Meeting.

President Finlay, of New Orleans, has addressed the following letter to A. G. Cassell, of Vicksburg, Miss., secretary of the Southern Association of Wholesale Druggists.

"Please notify the several members of the association that the date of the next meeting in Memphis is postponed till January, or February next.

"This change has been suggested by the Memphis delegation, who were requested to designate a day and place for the meeting, and in view of the fact that the annual meeting of the National Wholesale Druggists' Association has been postponed in like manner, and for the further reason, that most of the members will have then their annual inventory and be better prepared to discuss questions for the general welfare, the postponement seems to be a wise measure.

"Please state in your circular that each member will be duly notified of the date of meeting in ample time to prepare for attendance.

### BOARDS AND COLLEGES.

THE ARKANSAS BOARD OF PHARMACY met in the Senate Chamber in the city of Little Rock, on Wednesday, November 8, 1893, with all the members present except J. M. Anderson, president. There were nine applicants for examination of which the following were successful, viz.: Dr. J. S. Porch, Eureka Springs; J. M. Moss, Pine Bluff; E. W. Gazley, Pine Bluff; and H. L. Toland, Mineral Springs.

The next meeting will be held in the same place, on Wednesday, February 14, 1894. Applicants will take due notice that the examinations begin at 9 o'clock A.M. and close at 6 o'clock P.M. promptly, and must be completed between those hours. The sessions will not be held over to accommodate late arrivals.

Parties holding temporary certificates are also notified that they must be presented to the secretary, W. W. Kerr, Russellville, at that time or they will not be credited on their fees.

**NORTH CAROLINA BOARD.**—A meeting of the Board of Pharmacy will be held in the City of Raleigh, for the examination of candidates for license to practice pharmacy on Wednesday and Thursday, December 13 and 14, commencing at 9 o'clock A.M. For any additional information address the Secretary of the Board, Wm. Simpson, Raleigh, N. C.

**PHILADELPHIA COLLEGE.**—A meeting of the Philadelphia College of Pharmacy was held at the college on the 21st inst., J. W. England presiding. The following papers were read: "Effects of Noxious Gases on Animal Life," by Joseph R. Wilson; "A Talk on Vanilla," by Charles E. Hires; "Notes on the Examination of Wax," by Lyman F. Kebler, and "A Brief Paper on the Weights of the United States Pharmacopœia," by Allen Shryock. Professor J. P. Remington lectured on "Kon-seal's Apparatus for Administering Medicines." A copy of "Le Febvre's Chemistry," dated 1670, was presented to the college by Mr. F. H. Rosengarten, and a German Pharmacopœia was donated by Mr. G. M. Beringer. The committee in charge of the meeting was Wallace Proctor, Clement B. Lowe, Joseph W. England, William L. Cliffe and Henry Trimble, chairman.

The Board of Trustees held a reception to welcome Prof. Edson S. Bastin, A.M., the newly-elected professor of materia medica and botany, on Saturday evening, November 18, at eight o'clock, at the College Hall. After the reception Dr. Charles L. Mitchell, Class of 1872, exhibited stereopticon views, illustrating a Summer tour in Europe.

**THE WISCONSIN BOARD OF PHARMACY** at the meeting held on November 17 granted first grade certificates to James Wald, of La Crosse; H. F. McDonald, Hollandale; J. A. Block, La Crosse; and F. A. Kusel, Waukesha. Certificates of the second grade were granted to the following candidates: E. Meinecke, Jr., M. E. Trayser, F. J. Lambeck, William Heltman, William Peterson, A. J. Luebke, Jacob Stoker and Franz Braun, Milwaukee; F. G. Harbridge, Racine; Harry Bennett, Hurley; W. S. Arnold, Viroqua; J. A. Messerole, Mineral Point; H. A. Robinson, Beloit. The standing of twenty candidates was below the required standard. Since the board last met certificates have been granted to five registered pharmacists from other States. Several cases of illegal drug selling are to be acted upon. The full board was present, excepting John Rosch of Menasha. Since the last meeting licentiate certificates by registration have been granted to H. C. Arnold, Lake Geneva, from Illinois; John J. Kelly, Iron River, from Minnesota; Frank R. Crane, Hudson, from Minnesota; J. H. Burchall, Delavan, from Ontario, Canada; S. E. Krohn, Black River Falls, from Minnesota. These gentlemen have passed examinations in other States. Graduate's certificates have been granted to Arthur L. Ende, of New London, and O. N. Anderson, of Appleton, they having passed the March examination at Madison. Several cases of illegal drug selling were reported at this meeting, and action will be taken on them this month. During the meeting resolu-

tions of respect were adopted on the death of R. D. Pulford of Mineral Point, president of the board. The next meeting of the board will be held on January 17.

### Southern Siftings.

A. I. Erhard & Son's pharmacy at Bastrop, Tex., was burglarized recently.

Dr. W. D. Brice, of Columbia, S. C., and Miss Rachel Thompson, of Winnesboro, on November 15.

Dr. William A. Young, of Moreland, Ga., and Miss Lucy Bowers, of Newberry, S. C., were married on November 18.

A runaway horse went completely through the show-window of A. L. Bilisoly's store at Norfolk, Va., recently, and landed in the store.

T. A. Mullryne, who has been engaged in the drug business at Savannah, Ga., has gone to Atlanta to study medicine.

W. E. Towns, of the firm of Ernest Hawkins & Co., leading druggists of Huntington, Tenn., and Miss Sarah Priest, were married on November 16 at the M. E., Church, South.

It is reported that William R. Laughlin, who has been conducting a drug store at Seventh and Jefferson streets, assigned yesterday morning to the Louisville Trust Company. Mr. Laughlin has been in business about one year and was pushed to the wall by the hard times. His assets and liabilities are both small and about equal, though he hopes to pay out and continue business. His creditors are mainly wholesale drug houses of Louisville.

At a meeting of the Louisville Botanical Club on November 16, the committee appointed to see druggists in regard to Sunday closing made its report. The committee reported that 102 of the druggists seen were willing to partially close, remaining open from 9 to 12 A.M. and from 6 to 8 P.M.; 132 favored total suspension of business and twenty-six said they couldn't afford to close. So it was clear that no arrangement could be made at present, in view of the fact that there is no law to compel the druggists to close. Out of 150 druggists in the city 131 are members of the club. The dues have been reduced to \$5 per annum.

### Trouble in Indiana.

Financially the Indiana Pharmaceutical Association is a busted community.

It will be unable to issue any proceedings this year, owing to the fact that its money was all in the Indianapolis National Bank.

The president and each one of the directors of this bank, if they receive their just deserts, will be sent to the penitentiary. The directors deserve punishment more especially for not attending to their sworn duties. Had they attended to their duty as directors the money of depositors would still have been in the bank and there would have been no failure.—*Indiana Pharmacist*.

### OBITUARY.

Henry Stock, formerly in the drug business at 349 Seventh avenue, but who retired from active business some seven years ago, committed suicide by shooting him-

self on November 20. At the time of the shooting, Mr. Stock's family consisting of his wife and six children, were all away from the house. They returned soon after 5 o'clock. When Mr. Stock was called to supper, no response was received. One of his children went to his room and found him sitting dead in a chair. Mr. Stock was 64 years old. For twenty years prior to his retirement he had kept the drug store, which is still in existence, on the ground floor of the house in which he lived and died. Mr. Stock gave up business seven years ago. Long before that he had been afflicted with melancholia. Still, he had never threatened to take his life, and his tragic end was entirely unexpected by his family. During the late war Mr. Stock served in the army under Gen. Sherman and, later, as an assistant surgeon in the navy. He was a member of Koltes Post, G. A. R.

Frank W. Goodall, aged 23, of Holyoke, Mass., committed suicide about 9.30 o'clock on the 13th inst., by taking oil of mustard. He was employed in the drug store of his uncle, F. P. Goodall, at the corner of Dwight and Main streets, Springfield. Goodall and a fellow clerk, William F. Grady, were in the store together when Goodall poured out a glass of the poison and with the remark, "Grady, this looks good," drank it. No cause is known for the deed. Grady perceived what his comrade had done, summoned medical aid and antidotes were administered. In the meantime an ambulance was called and the unfortunate young man carried to the city hospital. Although everything possible was done for his relief, all proved in vain, and he died in a few hours. Mr. Goodall was a popular young man, unmarried, and had a very bright future.

The many friends and classmates of Mr. Winfield S. Hopkins will be grieved to learn of his death which occurred at his home in Boonton, N. J., on Tuesday, November 14. He died from consumption; he had a store at Meriden, N. J., but was compelled to give up business last Spring and go South, but his health grew worse instead of better, and he returned home two months ago. He leaves a wife and one child; his age was 29 years. He was a graduate of N. Y. C. P. of '86. He was all that a gentleman could be, an able pharmacist and chemist, respected and loved by all who knew him.

Dr. John Schwartze, formerly a druggist, died early Saturday morning, November 18, at his home 115 West Mulberry street, Baltimore. Dr. Schwartze was a son of Dr. A. J. Schwartze, and for twenty years previous to 1885 conducted a pharmacy at Druid Hill avenue and Biddle street. Failing health caused him to abandon business. Dr. Schwartze was sixty-three years of age. He leaves a widow and two children by a former wife, who are Mrs. H. C. Coulter, of Chicago, and James W. Schwartze, a druggist at Elkridge, Md.

George C. Lyman, clerk for E. A. Partridge, of Newtonville, Mass., was struck and fatally injured on November 14, by an out-bound freight train on the Boston and Albany Railroad, a short distance from the Newtonville depot. Lyman was removed at once to his home on Washington street in an unconscious condition, where it was found he had sustained a fracture of the skull.

Henry S. Northrup, of the firm of Northrup & Lyman, wholesale druggists, died at Toronto, Ont., on November 21. He was born in Decatur, N. Y., in 1820, and married in 1851 to Miss Strong. In 1854 he began the business of a druggist and was a manufacturer of patent medicine at Newmarket, and five years later took in Mr. Lyman as a partner. Twenty years ago the firm moved to Toronto, and prospered. Two months ago Mr. Northrup was stricken by paralysis, but appeared to recover. Ten days ago his nervous system weakened and he sank rapidly. He leaves a widow and one daughter, who is the wife of Mr. George Gooderham, the millionaire distiller.

W. H. Douglas, proprietor of the drug store bearing his name at the corner of Fulton and Pearl streets, Brooklyn, and one of the best known and oldest members of the trade in active business, died suddenly at his residence, 90 Lafayette avenue, on Saturday, November 11. The deceased was 66 years of age and was a member of several fraternal lodges in Brooklyn.

### Recent Drug Fires.

W. H. Adams, Royce, Tex., loss \$4,000, insurance \$1,000—M. S. Clark & Co., Media, Tex., loss \$7,000; insurance \$3,600—G. L. Keeney, Haverhill, Mass., loss not stated—Pittingill's pharmacy, Regina, N. W. T., loss, stock and building, \$3,300; fully covered—John Dawson, Regina, N. W. T., loss on stock and building \$4,000; stock not insured, building partly covered—Muench's pharmacy, Syracuse, small blaze—Albert Goetz & Co., 6708 Stony Island avenue, damage \$500—Scott pharmacy, University avenue, Rochester, small blaze, damage nominal—Foster's pharmacy, Appleton, Wis., loss \$4,000; fully insured—Dr. M. H. Verpoeten, Laramie, Tex., loss \$1,500—Mitchell's pharmacy, Fairfield, Ind., loss not stated—Moore's pharmacy, Arena, Mich., loss \$3,000; insurance \$1,500—R. W. Lafin, Wymore, Neb., fully insured—W. H. Baird, Lewisville, Ind., loss \$3,500; insurance \$2,600—Dr. J. E. Gaddis, Scottsdale, Pa., loss \$3,000—Max Bloomstein, Nashville, Tenn., loss not stated; insurance \$13,500—L. H. Harris Drug Co., Pittsburgh, Pa., about \$8,000; fully insured—Hyatt's pharmacy, Richmond, Ind., loss \$2,000; fully insured.

### CORRESPONDENCE.

#### Christmas Advertising.

Editor AMERICAN DRUGGIST:

DEAR SIR: As the holiday season approaches the brains of sundry drug clerks in various sections of the country are, no doubt, revolving the question of special window dressing for that season.

Three years ago I perpetrated a "Christmas Tree" on the defenseless public which not only called attention to our perfumes and fancy goods, but received a flattering notice in three newspapers. It was a capital advertisement as well as a window attraction.

I decorated an eight foot tree with some of the customary gee-gaws and baubles and displayed, or rather hung, on the tree "presents" for some of the country's notables.

For instance, I dedicated a bottle of Hair Reviver to solemn-visaged Bill Nye. A hair brush, comb and cake of soap to Herr Most—"recommended for daily use."

For (then) ex-President Cleveland, who at that time was steadily adding to a generous periphery, a bottle of our Cod Liver Oil Emulsion—"recommended for emaciation." For Senator Ingalls (then on the anxious bench) a porous plaster—"recommended for strengthening the back—and hopes."

For Jay Gould (peace to him) a small globe on which was inscribed "the Earth." For Robert Ingersoll a large candy horse—"recommended as a safer hobby than he now rides."

For Senator Quay a bottle of liquid cement—"will cement anything—possibly political factions."

T. B. Reed, Amelie Rives, John L. Sullivan, Prof. Koch and a number of others were also kindly remembered. Of course the same characters will not answer now, but a tree similarly gotten up for persons of recent prominence would be, as mine was voted, a unique attraction.

Respectfully submitted to my fellow clerks,  
RALPH B. GABLE.  
Salem, N. J., November 25th.

### Prescription Writing in Ohio.

To the Editor AMERICAN DRUGGIST:

Your editorial on prescription writing in the November 16th number reminds us that in a city of over 100,000 people, two medical colleges, two schools of pharmacy, and one medical journal, we only have knowledge of two or three physicians writing their prescriptions with distinctive signs for fluids and solids, and one of these physicians died recently. Yours truly,  
HARROP & CO.

COLUMBUS, O.

"An Advertiser's Dream" is the caption of an article from the pen of Dr. A. E. Dickinson in a recent number of *The Western Advertiser*. Dr. Dickinson is the manager of the Cudahy Pharmaceutical Co., of Omaha, Neb. He has become widely known of late by his contributions to the literature of advertising.

Harrop & Co., Columbus, Ohio, have published a neat little volume on the care of lamps, in which is contained much useful information regarding coal oil lamps burners, wicks and chimneys, how to procure and how to care for them. Druggists who use oil lamps will find a copy of the "Lamp Primer" a profitable investment. It retails at 25c.

The Alumni Association of the New York College of Pharmacy appears to be moving with more circumspection in the matter of publishing an organ of the association. It has been decided after all to appoint a pharmacist and alumnus of the college as editor, and O. G. Harrison, instructor in physiology, botany, pharmacognosy and materia medica, has been asked to occupy the tripod.

### The Proposed Tariff Changes.

The new tariff bill drafted by the Ways and Means Committee of the House of Representatives has at last been made public. The more important changes which affect the drug trade are embraced in the following

list, side by side with the duties as now levied under the McKinley tariff law:

| SCHEDULE A<br>CHEMICALS, OILS AND PAINTS.   |                |                   |
|---|----------------|-------------------|
|   | Proposed Rate. | Present Rate.     |
| Acetic or pyroligneous acid.....  | 50 p c         | 1 1/4 c           |
| Chromic acid.....   | 10 p c         | 6c                |
| Citric acid.....  | 50 p c         | 10c               |
| Tannic acid or tannin....   | 35 c           | 75c               |
| Tartaric acid.....  | 50 p c         | 10c               |
| Alcoholic perfumery, per gal.....   | \$2 & 25 p c   | \$2 & 50 p c      |
| Alumina, alum, alum cake, patent alum, sulphate of alumina, aluminous cake, alum in crystals or ground..... | 50 p c         | 6-10c             |
| Blackening of all kinds.....  | 50 p c         | 25 p c            |
| Refined borax.....  | 50 p c         | 5c                |
| Chalk, prepared.....  | 50 p c         | 1c                |
| All coal tar colors or dyes.....  | 50 p c         | 35 p c            |
| Collodion and all compounds of pyroxyline..   | 40c            | 50c               |
| Rolled or in sheets, but not made up.....   | 50c            | 60c               |
| If finished.....  | \$1            | 60c & 25 p c      |
| Ethers, sulphuric.....  | 25c            | 40c               |
| Spirits of nitrous ether....  | 20c            | 35c               |
| Fruit ethers, oils or essences.....   | \$1            | \$2.50            |
| Extracts and decoctions of dye woods and barks, etc.....  | 10 p c         | 7 1/2 p c         |
| Gelatin, glue, isinglass..  | 25 p c         | 1 1/4 c           |
| Glycerin, crude.....  | 1c             | 1 1/4 c           |
| Refined.....  | 3c             | 4 1/4 c           |
| Ink and ink powders, printer's ink.....   | 50 p c         | 30 p c            |
| Iodoform.....   | \$1            | \$1.50            |
| Licorice.....   | 5c             | 5 1/4 c           |
| Magnesia carbonate.....   | 3c             | 4c                |
| Calcined.....   | 7c             | 8c                |
| Alizarine oil, or oleate of soda, or turkey red oil.  | 30 p c         | 80c               |
| Castor oil.....   | 35c            | 40c               |
| Cod liver oil.....  | 50 p c         | 75c               |
| Flaxseed or linseed and poppy seed oil.....   | 15c            | 30c               |
| Peppermint oil.....   | 25 p c         | 80c               |
| Seal, herring, whale and other fish oil.....  | 25 p c         | 8c                |
| Opium, aqueous, extract of and tincture of.....   | 25 p c         | 40 p c            |
| Containing less than nine p c of morphia, and opium prepared for smoking.....                               | \$6            | \$12              |
| Barita paint, manufactured.....   | \$3            | \$6.75            |
| Blanc-fixe or satin white Black paint made from bone, ivory or vegetable                                    | 50 p c         | 25 p c            |
| Chrome yellow and all chromean colors.....  | 25 p c         | 4 1/4 c           |
| Ochre, sienna and umber   | 1 1/4 c        | 1 1/4 c           |
| Ultramarine blue.....   | 50 p c         | 1 1/4 c           |
| Varnishes.....  | 25 p c         | 35 p c            |
| Alcohol contained therein additional.....   | \$1.35         | \$1.35            |
| Vermilion red and colors containing quicksilver.....  | 50 p c         | 15c               |
| Whiting and Paris white   | 25 p c         | 1 1/4 c & 1c      |
| Zinc.....   | 25 p c         | 1 1/4 c & 1 1/4 c |
| All other paints and colors.....  | 25 p c         | 25 p c            |
| Acetate of lead.....  | 30 p c         | 30 p c            |
| Nitrate of lead.....  | 30 p c         | 3 1/4 c & 3 1/4 c |
| Orange mineral and red lead.....  | 35 p c         | 3 1/4 c & 3c      |
| White lead.....   | 30 p c         | 3c                |
| Phosphorous.....  | 25 p c         | 20c               |
| Bichromate and chromate of potash.....  | 50 p c         | 3c                |
| Hydriodate, iodide and iodide of potash.....  | 25c            | 50c               |
| Nitrate of potash.....  | 1 1/4 c        | 1c                |
| Prussiate of potash.....  | 50 p c         | 10c & 5c          |
| All medicinal preparations, including proprietary preparations of which alcohol is a component part.....    | 50c            | 50c               |
| All medicinal preparations not specially provided for.....  | 25 p c         | 25 p c            |
| Cosmetics, dentifrices, etc.....  | 40 p c         | 50 p c            |
| Santonine and all salts thereof containing 80 p c. or more of santonine.....                                | \$1            | \$2.50            |
| Castile soap.....   | 20 p c         | 1 1/4 c           |
| All descriptions of toilet soap.....  | 35 p c         | 15c               |
| Bicarbonate of soda or saleratus.....   | 1/4 c          | 1c                |

|  |         |         |
|--|---------|---------|
| Caustic soda.....  | 1/4 c   | 2c      |
| Chromate of soda.....  | 50 p c  | 3c      |
| Sal. soda.....   | 1/4 c   | 1/4 c   |
| Soda ash.....  | 1/4 c   | 1/4 c   |
| Silicate of soda.....  | 1/4 c   | 1/4 c   |
| Sponges.....   | 10 p c  | 50 p c  |
| Strychnia.....   | 30 p c  | 40 p c  |
| Sulphur, flowers of.....   | 50 p c  | \$10    |
| Sumac, ground.....   | 10 p c  | 4-10c   |
| Tartar, cream of.....  | 25 p c  | 6c      |
| Tartars and lees crystals, partly refined.....                     | 25 p c  | 4c      |
| Tartrate of soda and potassa, or Rochelle salts.                   | 10 p c  | 3c      |
| Castor beans or seeds.....   | 25 c    | 50c     |
| Flaxseed or linseed, poppyseed and other oil seeds.....            | 50c     | 30c     |
| [No drawback shall be allowed on oilcake made from imported seed.] |         |         |
| Chocolate, other than chocolate confectionery.....                 | 5c      | 5c      |
| Cocoa, prepared.....   | 5c      | 5c      |
| Cocoa butter or cocoa butterine.....                               | 3 1/4 c | 3 1/4 c |
| Mustard.....   | 10c     | 10c     |
| Spices, ground or powdered.....                                    | 3c      | 4c      |
| Cayenne pepper.....  | 2 1/4 c | 2 1/4 c |
| Unground sage.....   | 1c      | 3c      |
| Vinegar.....   | 7 1/4 c | 7 1/4 c |

There shall be allowed on the imported tin plate used in the manufacture of cans, boxes, packages and all articles of tinware exported, either empty or filled with domestic products, a drawback equal to the duty paid on such tin plate, less 1 per cent. of such duty.

### SCHEDULE H.

SPIRITS, WINES AND OTHER BEVERAGES.

|  | Proposed Rate. | Present Rate. |
|--|----------------|---------------|
| Brandy and other spirits manufactured or distilled from grain or other materials.....  | \$1.80         | \$2.50        |
| Cordials, liquors and other spirituous beverages, or bitters of all kinds containing spirits and not specially provided for..... | 1.80           | 2.50          |

No lower rate or amount of duty shall be levied, collected and paid on brandy, spirits and other spirituous beverages than that fixed by law for the description of first proof; but it shall be increased in proportion for any greater strength than the strength of first proof, and all imitations of brandy and spirits or wines imported by any names whatever shall be subject to the highest rate of duty provided for the genuine articles respectively intended to be represented, and in no case less than \$1 per gallon.

|   |         |            |
|---|---------|------------|
| Bay rum or bay water, whether distilled or compounded, of first proof, and in proportion for any greater strength than first proof..... | \$1.15c | \$1.50     |
| Malt extracts, in casks..   | 30c     | 40c        |
| In bottles or jugs.....   | 30 p c  | 40 p c     |
| Solid or condensed....  | 30 p c  | 40 p c     |
| Cherry juice and prune juice, or prune wine, and other fruit juice containing 18 per cent. or less of alcohol.....                      | 50c     | 60c        |
| If containing more than 18 per cent. of alcohol.....  | 1.80    | 2.50       |
| Ginger ale or ginger beer   | 50 p c  | 13c to 26c |
| All imitations of natural mineral waters and all artificial mineral waters.   | 30 p c  | 16c to 25c |

### FREE LIST.

|  | Proposed. | Existing Rate. |
|--|-----------|----------------|
| Antimony, lb.....  | free      | 1/4 c          |
| Copper sulphate, lb.....   | free      | 5c             |
| Borax, crude, lb.....  | free      | 3c             |
| Cobalt, oxide of, lb.....  | free      | 30c            |
| Iron sulphate, lb.....   | free      | 1 1/4 c        |
| Cork wood cut into squares or cubes, lb....  | free      | 10c            |
| Drugs, such as barks, beans, berries, etc., advanced in value or condition by refining or grinding or other process of manufacture.... | free      | 10 p c         |
| Iodine, resublimed lb....  | free      | 30c            |
| Magnesium sulphate, lb..   | free      | 1 1/4 c        |
| Ochre and ochrey earths, lb.....   | free      | 1/4 c          |
| Potash, caustic, refined, in sticks or rolls, lb.....  | free      | 1c             |
| Quicksilver, lb.....   | free      | 10c            |
| Soap, not otherwise provided for.....  | free      | 50 p c         |
| Seeds, not otherwise provided for.....   | free      | p c            |

**Springer Torsion Balance Exhibit.**

We illustrate below the World's Fair exhibit of the Springer Torsion Balance Co., 92 Reade street, New York. This exhibit attracted the attention of almost every visitor, and gave an opportunity to thousands of seeing the great advancement that has been made in the art of making scales by entirely dispensing with steel or agate knife edges as well as of friction. A great variety of confectioners', grocers', druggists', jewelers', silk, postal, meat, patent butter, bullion and other scales, was displayed, all of which received the highest awards possible.

In 1886 the judges of the Fifty-fifth National Industrial Exhibition of the American Institute of New York awarded the "Medal of Superiority" to this firm;

trouble involved. Of the manufacturers who appeal directly to the drug trade, C. W. White & Co., of Boston, Mass., are the most favorably known. The firm was established in 1857 by C. W. White who conducted the business until 1869 when he admitted his younger brother Dr. E. M. White who is a surgeon of wide experience, having served with credit during the late war. From the beginning the business has had a steady and uninterrupted growth until it is now one of the foremost houses in this line of trade. The firm is regarded as one of the oldest and solidest of Boston's business institutions. The first managing partner is F. E. Wilbur, who has been connected with the firm for over twenty-five years. The twelfth edition of a comprehensive catalogue containing illustrations of the specialties manufactured by

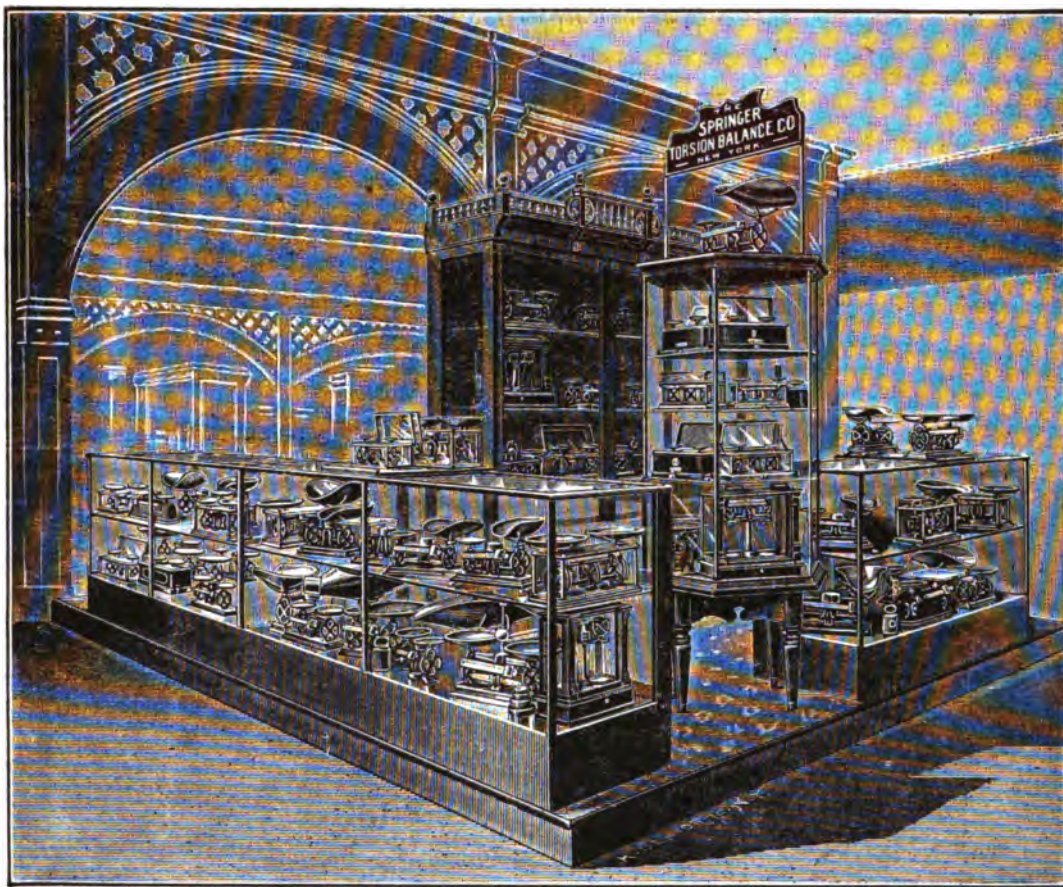
lanin, lanoline cold cream, lanoline soap, lanoline pomade, lanoline toilet cream, refined saccharine, 500 times sweeter than sugar; cocaine hydrochlorate (Zimmer), and Hauff's salicylic acid.

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**Ten Cents in Your Hand Better Than \$10 in Somebody Else's Bank.**

Two or three years ago Hance Brothers & White made a new throat lozenge by putting some well-known drugs (wild cherry, licorice, cubebs, tolu, etc.) together and compressing the mixture with sugar, and named it "Frog in your Throat? 10c," the retail price a part of the name (\$7 a gross).

The jobbers wanted it before they knew it was good for anything; and Hance



WORLD'S FAIR EXHIBIT OF TORSION BALANCE CO.

and in November, 1891, the Franklin Institute of Philadelphia, upon the recommendation of the sub-committee on science and the arts, awarded the John Scott Legacy Premium and Medal.

The merits of these scales are so well known among those who consider durability, accuracy and quickness of action of the utmost importance, that there is no need to dwell on their numerous advantages.

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**Profitable Side Lines.**

Trusses, elastic stockings, suspensories, supporters, etc., are among the most profitable of the sundries handled by druggists. When obtained direct from the makers, the profit of handling sundries of this kind is sufficient to recompense druggists for any

C. W. White & Co., has been issued quite recently and will be mailed free on request to any druggist mentioning this paper.

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**Awards for Saccharine.**

We are informed that saccharine and saccharine specialties have been awarded the medal and diploma at the World's Columbian Exposition, Chicago, 1893. The agents for saccharine in the United States are Schulze-Berge & Koechl, 79 Murray street, New York. Schulze-Berge & Koechl are also importers and sole licensees for the United States for antipyrine, agathin, alumnol, benzozol, dermatol, hypnol, iodopyrine, phenosalyl, tuberculin (Dr. Koch), tuberculocidin (Dr. Klebs), tumenol oil, tumenol powder, lanoline, thi-

Bros. & White say they never heard of a retail druggist dropping it. Evidently the name set it going, but the lozenge itself is what keeps it going.

The business for this article is well established, and there are thousands of people who do not intend to be out of "Frog in your Throat."

They have other 10 cent articles that are equally as good, for instance, Headache Stop, Easy Physic, etc. In order to prove this statement, we would advise you to make a trial of them.

They say that one thing to learn is that 5 and 10 cent bits of nickel and silver that people are glad to bring the druggists are better than bars of gold and silver that the latter can't get at. They practice exactly what they preach.

## World's Columbian Exhibition

## LIST OF AWARDS.

Awards consisting of medals and diplomas have been conferred on the below named firms of pharmaceutical chemists and manufacturers for stated excellence in their respective lines:

Doliber-Goodale Co., Boston.  
Food for infants and invalids.  
Dundas Dick & Co., New York.  
Capsules and pharmaceutical preparations.  
Drevet Manufg. Co., New York.  
Peroxide of hydrogen, etc.  
Fairchild Bros. & Foster, New York.  
Digestive ferments and peptonized foods.  
Reed & Carnrick, New York.  
Pharmaceutical and food preparations.  
Seabury & Johnson, New York.  
Medical, surgical and antiseptic specialties.  
Sharp & Dohme, Baltimore, Md.  
Pharmaceutical preparations.  
Frederick Stearns & Co., Detroit.  
Pharmaceutical preparations and toilet articles.  
Tilden & Co., New Lebanon, N. Y.  
Fluid extracts, etc.  
Upjohn Pill & Granule Co., Kalamazoo, Mich.  
Pills and granules.  
John Wyeth & Brother, Philadelphia.  
Pharmaceutical preparations.  
Burroughs Bros. Manufacturing Co., Baltimore, Md.  
Pharmaceutical preparations.  
W. J. M. Gordon Chemical Co., Cincinnati.  
Glycerin.  
Gribble & Nash, New York.  
Refined camphor.  
H. G. Hotchkiss' Sons, Lyons, N. Y.  
Essential oils.  
Fritsche Bros., New York.  
Essential oils.  
Lazell, Dalley & Co., New York.  
Domestic perfumery.  
Toilet waters.  
Sachet powders.  
Enoch Morgan's Sons, Chicago.  
Hand sapolio.  
Kitchen sapolio.  
Pennsylvania Salt Mfg. Co., Philadelphia.  
Alum.  
Kryolith, etc.  
Lye.  
Soda.  
Albert M. Todd, Kalamazoo, Mich.  
Essential oils and their products.  
Chemicals.  
Models of machinery.  
Manuscripts.  
Roessler & Hasslacher, New York.  
Chemicals.  
Ceramic colors.  
Fire gold.  
Theo. Ricksecker, New York.  
Perfumery.  
Toilet soaps.  
Gardner's Syrup Hydriodic Acid, New York.  
Powers & Weightman, Philadelphia.  
Chemicals.  
Henry Troemner, Philadelphia.  
Counter scales.  
Prescription scales.  
Springer Torsion Balance Co., N. Y.  
Scales and balances.  
Springfield Scale Co.  
Scales.

## Notes on Prices.

## WHOLESALE DRUGGISTS' PRICES.

We note below the more important price changes which have taken place during the past month in the drugs and chemicals, as purchased in ordinary quantities by retail druggists, together with comment upon the articles in which special features are to be noted.

ARACA NUT, whole, has declined 10c.; powdered is also lower and quoted 25c. lb.  
BALSAM COPAIBA has declined to 45 @ 50c.  
BALSAM PERU has advanced to \$1.60 @ \$1.75.  
BARBADOES TAR is now quoted 10 @ 15c.  
BEAN, CALEBAR, has declined to 20 @ 25c.  
BERRIES, CUBEB, have declined 5c. and are now quoted 30 @ 35c.  
DOVER'S POWDER is higher and quoted \$1.20 @ \$1.25.  
ERGOT, SPANISH, has declined to 50 @ 60c.; powdered 60 @ 70c.  
GUARANA is lower at \$1.35 @ \$1.50.  
IODINE has declined and is now selling at \$3 75 @ \$4.  
IRON BY HYDROGEN has declined 5c. and present range is 70 @ 75c.  
LEAF, BUCHU, is somewhat lower at 45 @ 50c.  
LUNAR CAUSTIC is lower; quoted 60 @ 62c.  
MANNAS have declined in the interval; \$1.16 @ \$1.25 is asked for large flake and 40 @ 50c. for small.  
OILS, LEMON, has declined to \$2 @ \$2.25; Sanderson's is firm at \$2.50.  
NEROLI has been marked down a point and quotations are revised as follows: Bigarade, \$2.50 @ \$2.75; Chiriz, \$2.75 @ \$3; Petale, \$3 @ \$3.25.  
TANSY has advanced. The current figures are \$3 @ \$3.25.  
THYME has suffered a decline and is quoted \$1.10 @ \$1.25.

## Review of the Wholesale Market.

NEW YORK, November 29, 1893.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

There is a slight improvement noticeable in the volume of business transacted by wholesale druggists, but complaint is yet made of a falling off in the demand usually experienced in the opening months of Autumn. Collections are reported better, however, and there is altogether an increased feeling of confidence among retail druggists throughout the country. Orders for holiday goods are coming in briskly, and the prospects for the usual Fall distribution are quite encouraging. Among articles which have advanced in price or are tending firmer are cod liver oil, castor fiber, golden seal root, sarsaparilla and peppermint oil. Cascara sagrada, wintergreen oil and acetanilid are easier.

## DRUGS.

ACETANILID has declined to 34 @ 35c. owing to competition.

BALSAM COPAIBA is scarce and firm at 37c. This figure appears to be above buyers' ideas and no sales are reported.

BALSAM PERU is also scarce. The small lot in first hands is held at \$1.40. Jobbing prices are \$1.45 to \$1.50.

BALSAM TOLU is in strong position. The small available supply in second hands is held at 24 @ 25c.

BUCHU LEAVES, short, are in light supply, and held at 12½ @ 14c. for ordinary and prime green respectively.

CACAO BUTTER is meeting with fair inquiry, and has sold during the week to the extent of 4,000 lbs. at 32½c.

CASCARA SAGRADA is dull and easy, 6½ @ 6¾c. being quoted, with possible sellers at 6c.

CETACEUM is offering from second hands at 29c. for block and 30c. for cake.

CHAMOMILE FLOWERS, German, are moving quite freely in cask lots and less at 19 @ 24c.

COD LIVER OIL has advanced, and is developing a stronger tendency. The import cost is now \$19 for prime oil. Spot quotations range from \$20 to \$21.50 as to quality and seller.

COCA LEAVES, Truxillo, are higher at 14c.

CUTTLE BONE, Trieste, in single straps is held at 12c. We are reported sales of 500 lbs. at ½c. reduction this figure.

DAMIANA LEAVES are beginning to arrive. Prices quoted this year are lower than those quoted for some time past. Here they are quoted 13c.

ERGOT does not vary either in price or demand. The slight advance on the other side does not affect this market. German is offered in instances at 20c., but without sales of consequence.

GRINDELIA ROBUSTA is offering to arrive at about 5c.

JABORANDI LEAVES are now procurable in jobbing quantities at 45c.

JUNIPER BERRIES are tending higher, the inside price now is 2½c. though we hear of some transactions at 2¼c.

OLIVE OIL, manufacturing grade, has been attracting some attention, and we are reported sales of Malaga to the extent of 25 barrels at 57c.

OPIUM is still tending lower and buyers appear to have the best of the situation. There is no demand, however, and it is questionable if interest in single cases could be stimulated by offerings at \$2.10. \$2.20 is openly quoted without finding buyers. Broken lots of 25 pounds up were offered at \$2.20, and it was generally believed that \$2.15 would buy cases.

QUININE is meeting with fair inquiry with a free movement into channels of consumption. There is little stock remaining in the hands of outside holders and for this 19½ @ 19¾c. is asked.

SALICINE offers in instances at \$1.55 @ \$1.65 as to quantity, but there is no demand to speak of.

SUGAR OF MILK, domestic, is finding a good jobbing outlet at 10½ @ 11c.

TONKA BEANS are in limited supply, and none are coming forward. A sale of 600 lbs. at \$1.95 is reported, but \$1.90 will be accepted by some jobbers. First hands want \$2 for the new crop, which is said to have been small and of very inferior quality.

## DYESTUFFS.

CUTCH is held firmly at 4½ @ 4¾c. as to quantity with sales of 150 bales approved quality SM within that range.

GAMBIER is dull and featureless. Shipments quoted at 3.85 @ 3.95c.

LOGWOOD has sold heavily during the week with the range at \$34 @ \$36. We are reported sales of some 300 tons at the inside figure.

SUMAC, Sicily, to arrive and spot, is finding sale at \$70 @ \$75 respectively. Shipments, \$65.

## CHEMICALS.

AMMONIUM CHLORIDE, crude (Sal-ammoniac) is half a cent higher. White granulated 6c. and rough granulated 6½c.

ARSENIC, white, has continued in good demand for both spot and to arrive.

BLEACHING POWDER is scarce, firm and in demand.

BRIMSTONE, crude seconds, offers at \$18 to arrive, there is none on spot.

CHLORATE OF POTASH appears to be hardening, but quotations are nominally unchanged.

CREAM OF TARTAR is now quoted 18c. for crystals and 18½c. for powdered.

NITRATE OF SODA is quiet and lower. The jobbing quotation stands at \$1.82½ @ \$1.85.

PRUSSIAN OF POTASH, yellow, has advanced to 20½c. for 20,000 lb. lots or more, and 21c. for smaller quantities.

SODAS, Sal and Caustic, are being offered and accepted for forward delivery. Spot goods are without change.

#### ESSENTIAL OILS.

ANISE, Bergamot, Cassia and Clove, are without important change either as regards price or demand.

LEMON is unsettled with prime offering as low as \$1.30.

PEPPERMINT, Wayne County, is firmer with \$2.75 asked in instances; but little business is transacted at this figure. The general asking price is \$2.60 @ \$2.65. Western is held at \$2.40 @ \$2.50. HGH is quoted at \$3 @ \$3.10, the outside being the general quotation.

TANSY OIL is expected soon to advance in price because of scarcity in the crop.

#### GUMS.

ALOES, Curacao, have declined in London as the result of large arrivals from this side. There is no stock in first hands here and outside holders adhere to their quotations of 2½ @ 3c.

ARABIC SORTS have met with fair inquiry and we are reported numerous small sales within the range of 11 @ 13c.

ASA FETIDA is scarce at 25c. for London gum.

BENZOIN, fair grades, can be had at 36 @ 40c.

SHELLACS have undergone a revision, the prices on all grades except DC having been advanced. VSO and Triangle G are now quoted 31 @ 32c., Octagon B 31c.,

Diamond I, SD and SS 29½ @ 30c., TN 27c., and AC Garnet 24 @ 25c.

TRAGACANTHS are passing out freely at full prices. Of East Indian gum 100 cases sold on private terms, the quoted prices being 8 @ 11c.

#### ROOTS.

CALAMUS continues dull at nominally unchanged quotations.

GOLDEN SEAL, on account of scarcity, has advanced to 22c.

IPPECAC has advanced in the interval and we are now quoted \$1.20 @ \$1.30 for prime root. The demand continues active.

LOVAGE, German, is selling to arrive at 16c. For spot goods the market is quiet but firm.

SARSAPARILLA, Mexican, is in slightly better supply and a fair moderate business is being transacted at the current range of 10½ @ 11c.

SENEGA is dull. Manitoba might be purchased for 41c. and Minnesota 43c.

SNAKE, Virginia, is without features of importance. A lot of 300 lbs. which offered recently at 27c. has been disposed of at that figure. The inside spot price is now quoted 30c.

#### SEEDS.

ANISE, Italian, is quoted in a jobbing way at 10½c. though 10c. might buy.

CANARY, Smyrna, is firm at 2½c. for large orders and 2½c. for jobbing lots.

CARAWAY is dull and lower at 6½ @ 6¾c.

CARDAMOMS have been in demand and among recent transactions are included sales of 2,000 lbs. of Mangalore on private terms.

CELERY is held at 17 @ 18c. though we hear of occasional sales of large lots at 16c.

HEMP, Russian, is held at 3c. on spot and 2½c. to arrive.

MUSTARD is quoted 4c. for California yellow on spot. There is a scarcity at primary sources. Bombay costs 2½c. to import. A brisk jobbing demand is supplied at 2½ @ 2¾c.

#### The Best Advertisement

Is a trial of a good article. Hinds' honey and almond cream is the good article. A. S. Hinds, Portland, Me., will send you a free sample if you mention this journal when writing for it, and will not only give you a free sample for your own examination, but will supply you with free samples for your customers. Now is the time to push this preparation, it costs only a postal card to get a free sample.

#### For Show Windows.

If you want something very neat and attractive for your show window, send a label or business card to Woolrich & Co., Palmer, Mass., mentioning this paper and it will be forwarded free.

#### A Cure for Cutting.

That is what J. C. Scates, the popular and able pharmacist of Westbrook, Me., has found at last. For full particulars write Mr. Scates mentioning this journal.

#### How to Make Hot Soda Pay.

This is a good deal like the recipe for stewed hare. First catch your hare. So you must first get your soda fountain. Dean, Foster & Co., of Blackstone street, Boston, can help you a great deal on that head by sending you their catalogue of Hot Soda Apparatus. They have them at all sorts of prices and will send a catalogue promptly if you mention this journal.

Then you must have good flavors. You should see the October 23 issue of this journal for the best collection of formulas.

Dr. T. H. Coussens, of the firm of Coussens & Beerman, a well-known druggist of South Nashville, Tenn., has disposed of his interest to Mr. Beerman.

## Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted one time free; for each additional insertion Fifty Cents. Write distinctly, on one side of paper only, and do not use postal cards.*

#### POSITIONS VACANT.

WANTED.—Traveling druggmen to handle Ames Spavin Cure as a side line backed by liberal advertising. Address A. J. Ames & Son, Kylertown, Pa.

#### POSITIONS WANTED.

POSITION WANTED for the vicinity of New York city or in New Jersey; a first-class German-speaking clerk wants position at very moderate compensation. Address "E. W.," 302 W. 12th street, care Dr. Gallagher.

SITUATION WANTED as distributing advertising agent; would prefer the Western States; have had experience there; 5 years in drug business; A. references. Address "Stephenson," Box 41, Richfield Spa, N. Y.

DRUGS.—Young man (23), 6 years' experience, registered in Pennsylvania, graduate of Philadelphia College of Pharmacy, wants position in wholesale or retail store by Jan. 1. Ray W. Kotika, 530 N. 7th street, Philadelphia.

A POSITION WANTED in city or country pharmacy; have had about five years' experience in the business; for the last seven months have had charge of Richtmyer's pharmacy; good references. W. B. Corbin, Cooperstown, N. Y.

DRUG CLERK.—N. Y. State licentiate; American; 30 years' experience; city and country; good habits and business qualifications; competent to take charge if necessary; desires permanent position at moderate salary; country preferred. Address for ten days, "Pharmacist," Box 507, Bath, Steuben Co., N. Y.—23.

DRUGGIST.—8 years' experience; licensed; desires permanent situation either city or country. Address "Trustworthy," this office.

#### BUSINESS OPPORTUNITIES.

FOR SALE.—A fine drug store in Indiana town doing a \$10,000 business; this is a chance to buy a good business that is worth investigating. Address "Indiana," this office.—22.

BUSINESS FOR SALE in good position in manufacturing town, New York State; a railway center; average returns \$250 per month, capable of increase; well stocked; full prices; satisfactory reasons for disposal; cash \$800, remainder by easy installments. For particulars address "B. T.," care Mr. Bennell, 304 Broadway, New York city.

FOR SALE.—Pharmacy, best location. Address "Aquila Alba," Toledo, Ohio.

A GREAT CHANCE for a good drug business, to be sold at a bargain; 2,700 inhabitants; large outside territory that trade here, besides being one of the best Summer resorts in central New York; county seat of Otsego, the only Summer resort on Otsego Lake. Come and see for yourself or address, Ferguson's Pharmacy, Cooperstown, N. Y.

FOR SALE.—A fine drug store, doing a business of \$10,000; stock will invoice \$6,000; price asked \$5,000; reason for selling, death of proprietor. Address S. C. Plank, Admr., Waynesboro, Franklin Co., Pa.

STORE TO LET.—First-class place for drug shop; 113 and 117 Wright street, near Broad street; rent \$20 per month. F. Beyer, 111 Wright street, Newark, N. J.

WANTED to invest \$1,000 or more in a drug business which will bear investigation. Address "B.," 117 Jefferson Street, Buffalo, N. Y.

DRUGGIST, WHITE PLAINS.—For rent, corner store in new Auditorium Building in which the new Opera House building will be completed December 1; good opportunity for the right man. Apply to L. W. Munroe, White Plains, N. Y.—24.

FOR SALE below inventory, old established drug store in Little Falls, N. J.; 60 minutes from New York; stock and fixtures inventory \$1,500; special inducement to cash buyer. Address B. J. Crane, Morristown, N. J.—24.

DRUG STORE in Jersey City for sale; old stand, doing good business; owner retiring. Address "Rhei," at this office.

FOR SALE.—A Puffer fountain and generator with five draughts, now in use; cheap for cash. Masten's drug store, Albany, N. Y.—22.

DRUG STORE for sale; net profits \$1,800 per year; cheap rent; long lease; must sell at once; going out of business; will take \$1,500 cash; rare bargain. Come and see store, 187 Grand street, Jersey City.—22.

FIRST CLASS drug store for sale; invoice \$5,000; price \$4,000; part cash. Address, Box 174, Mamebeck, N. Y.

DRUG CLERK, New York State licentiate, twenty years' experience city and country; temperate, competent, good business qualifications and good habits, desires permanent position; low salary; country preferred. Address, for ten days, "Pharmacist," Box 507, Bath, Steuben Co., N. Y.

**It should be understood that the prices quoted in this column are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a considerable range of prices.**

|                           |       |   |        |
|---------------------------|-------|---|--------|
| Acetanilid, bulk, per lb. | .34   | ● | .35    |
| " lbs. per lb.            | ...   | ● | .58    |
| " ozs. per oz.            | ...   | ● | .06%   |
| Acetate of lime.....      |       |   |        |
| Brown, per 100 lb....     | .90   | ● | .95    |
| Gray, per lb.....         | .01%  | ● | .02%   |
| Acids.....                |       |   |        |
| Acetic Com'l, per lb.     | 1.87% | ● | .12%   |
| Aquafortia, 35 deg....    | .03%  | ● | .03%   |
| " 40.....                 | .07%  | ● | .04%   |
| Benzoic, German.....      | .47   | ● | .54    |
| " English.....            | .40   | ● | .09%   |
| Boracic, Whole.....       | .15%  | ● | .14    |
| " Powdered.....           | .13%  | ● | .14    |
| Citric, American.....     | .44%  | ● | .46    |
| " English.....            | ...   | ● | ...    |
| Carbolic Crystals,...     |       |   |        |
| bulk.....                 | .13%  | ● | .17%   |
| lb. bottle.....           | .80   | ● | .81    |
| Muriatic, 16 deg. deg.    | .85   | ● | 1.85   |
| Nitric, 32 degrees.....   | .03%  | ● | .04%   |
| " 40.....                 | ...   | ● | .04%   |
| Oxalic, English.....      | .06%  | ● | .06%   |
| " German.....             | .06%  | ● | ...    |
| Picric.....               | .86   | ● | .86%   |
| Salicylic.....            | 1.00  | ● | 1.88   |
| Sulphuric.....            | .70   | ● | 1.00   |
| Tartaric, Crystals....    | .87%  | ● | .83    |
| " Powdered.....           | .88%  | ● | .83    |
| Tannic.....               | 1.05  | ● | 1.80   |
| Alcohol, Grain, per gal.  | 2.84  | ● | 2.88   |
| (Lease rebate.).....      |       |   |        |
| Wood, 95%.....            | 1.00  | ● | 1.05   |
| Alcohols.....             |       |   |        |
| Alcoholic.....            | ...   | ● | 1.50   |
| Alum, Lump, per 100 lb.   | ...   | ● | 1.75   |
| Ground, per 100 lb....    | ...   | ● | 1.80   |
| Antifebrine, per oz.....  | .19   | ● | .80    |
| Antipyrine, per oz.....   | 1.80  | ● | 1.40   |
| Arrow root, Berm., lb..   | .84   | ● | .85    |
| St. Vincent, in bbl., lb. | .11   | ● | ...    |
| Aromatic.....             |       |   |        |
| Red Saxon, lb.....        | .05%  | ● | .06%   |
| White.....                | .03%  | ● | .03%   |
| Balsam, Copaiba, lb....   | ...   | ● | .37    |
| Fir, Canada, gal.....     | 3.00  | ● | 3.85   |
| Fir, Oregon, gal.....     | .70   | ● | ...    |
| Peru, lb.....             | 1.35  | ● | 1.50   |
| Tolu, lb.....             | .84   | ● | .85    |
| Bark, Buckthorn, per lb.  | .07%  | ● | .09    |
| Cascara Sagrada, lb..     | .06%  | ● | .06%   |
| Elm, lb.....              | .10%  | ● | .11    |
| Orange peel.....          | .06%  | ● | .07    |
| Sassafras, per lb.....    | .06%  | ● | .07    |
| Soap, lb.....             | .03%  | ● | .04%   |
| Bicarb. Soda, Engl., lb.  | .03%  | ● | .03%   |
| domestic, lb.....         | .29   | ● | 3.00   |
| Bichromate, Pot'h, lb.    | .10%  | ● | .11    |
| Bismuth, Sub. Nit.,       |       |   |        |
| per lb, bulk.....         | 1.95  | ● | 2.00   |
| Bismuth, Sub. Carb.,      |       |   |        |
| per lb, bulk.....         | 2.85  | ● | 2.30   |
| Bleach'g Powd., per lb.   | .08   | ● | .08%   |
| Blue Vitriol, lb.....     | .03%  | ● | .03%   |
| Borax, refined, lb.....   | .07%  | ● | .08%   |
| Concentrated, lb.....     | .07%  | ● | .08%   |
| Brimstone, best ad, ton   | 19.00 | ● | 19.50  |
| Bromide Potash, Do-       |       |   |        |
| mestic, b'lk, lb.....     | .35   | ● | .36    |
| bottles, lb.....          | .43   | ● | .44    |
| Bromide Ammonium,         |       |   |        |
| bulk.....                 | .43   | ● | .44    |
| Bromide Sodium, b'lk..    | .40   | ● | .41    |
| Bromine, bulk.....        | .43   | ● | .45    |
| Burgundy pitch, per lb.   | .08%  | ● | .08%   |
| Cacao Butter:             |       |   |        |
| 1-lb. boxes, lb.....      | .32%  | ● | .34    |
| Dutch A., per lb.....     | .33%  | ● | .34%   |
| Caffeine.....             | 1.90  | ● | 2.85   |
| Camphor, ref'd, bbls, lb  | .45   | ● | ...    |
| cases, lb.....            | .46   | ● | .48    |
| Cantharides, Chinese, lb. | .88   | ● | .30    |
| Russian, lb.....          | .70   | ● | .75    |
| Carb. Ammonia.....        |       |   |        |
| casks, lb.....            | .08   | ● | .08%   |
| Cassia Buds, lb.....      | .18%  | ● | .19    |
| Castor Oil, cases, lb..   | .15   | ● | .15%   |
| Barrels, lb.....          | .14%  | ● | .15    |
| Caustic Soda, 70%, 100 lb | 2.80  | ● | 2.87%  |
| Caustic Soda, 60%, 100 lb | 2.00  | ● | 3.10   |
| Chalk, Engl. Precip.,     |       |   |        |
| bulk, lb.....             | .04   | ● | .06    |
| Chloral Hydrate Crys-     |       |   |        |
| tals, bulk, per lb....    | .05   | ● | 1.10   |
| Hydrate crusta, bulk,     |       |   |        |
| per lb.....               | .90   | ● | 1.05</ |

|                                     |       |   |       |
|-------------------------------------|-------|---|-------|
| Oedine bulk, oz.....                | 4.25  | • | ...   |
| Codine, eight.....                  | 4.65  | • | ...   |
| Cod Liver Oil, Norwegian, bbls..... | 90.00 | • | 25.00 |
| Colocynth.....                      |       |   |       |
| Trieste, lb.....                    | .87   | • | .38   |
| Spanish.....                        | .80   | • | .84   |
| Copperas, per 100 lb.....           | .80   | • | .90   |
| Cr. Tartar, Crystals, lb.....       | .18   | • | .18%  |
| Powdered, lb.....                   | .18%  | • | .18%  |
| Cubeb Berries, XX, lb.....          | .81   | • | .82   |
| Ordinary, lb.....                   | .17%  | • | .18   |
| Cutch, bales, SM, lb.....           | .04%  | • | .04%  |
| Cutch, boxes lb.....                | ...   | • | .09   |
| Cuttle bone, Trieste, lb.....       | .10   | • | .11   |
| Jeweler's lb.....                   | .35   | • | ...   |
| Dextrose.....                       | .04%  | • | .05   |
| Divi Divi, per ton.....             | 50.00 | • | 60.00 |
| Dragon's Bl d, lump, lb.....        | ...   | • | ...   |
| In reeds, lb.....                   | .45   | • | ...   |
| Epsom Salts, per 100 lb.....        | 1.10  | • | 1.20  |
| Ergot.....                          |       |   |       |
| G'm'n and Russ'n, lb.....           | .26   | • | .30   |
| Spanish, lb.....                    | .30   | • | .32   |
| Ergotine, Domestic.....             | ...   | • | 4.00  |
| German.....                         | 4.00  | • | ...   |
| Flowers.....                        |       |   |       |
| Arnica Flowers, per lb.....         | .10%  | • | .11   |
| Chamomile.....                      |       |   |       |
| German, New, lb.....                | .79   | • | .84   |
| Roman, New.....                     | .10   | • | .10   |
| Roman, lb., old.....                | .12   | • | .80   |
| Lavender Flowers.....               |       |   |       |
| Ordinary, per lb.....               | .04   | • | .08   |
| Select, per lb.....                 | .15   | • | .65   |
| Gambier, lb.....                    | .03%  | • | .04%  |
| Glycerin, bbls, lb.....             | ...   | • | .73%  |
| " cases, lb.....                    | .14   | • | .16   |
| Grains, Paradise, lb.....           | .06%  | • | .07   |
| Guarana, lb.....                    | 1.00  | • | ...   |
| Gums.....                           |       |   |       |
| Aloes, Barb, lb.....                | .06   | • | .72   |
| " Cape, lb.....                     | .05%  | • | .06   |
| " Curacao, lb.....                  | .08%  | • | .03   |
| " Socotrine, lb.....                | .30   | • | .40   |
| Arabic 1st picked.....              | .47%  | • | .55   |
| " ad.....                           | .34   | • | .36   |
| Arabic, sorts.....                  | .11%  | • | .12%  |
| Asafetida, lb.....                  | .09   | • | .095  |
| Benzoin, lb.....                    | .35   | • | .40   |
| Chicle, lb.....                     | .83   | • | .84   |
| Gamboge, lb.....                    | .52   | • | .54   |
| Guaiac, lb.....                     | .76   | • | .82   |
| Kino, lb.....                       | .75   | • | 1.00  |
| Mastic, lb.....                     | .62%  | • | .70   |
| Myrrh, lb.....                      | .80   | • | .38   |
| Olibanum, sorts, lb.....            | .05%  | • | .06%  |
| " tears, lb.....                    | .11   | • | .13   |
| Sandal, lb.....                     | .89   | • | .90   |
| Senegal, picked, lb.....            | .14   | • | .60   |
| " sorts, lb.....                    | .09%  | • | .10   |
| Shellac, DC, lb.....                | .34   | • | .35   |
| " VSO, lb.....                      | .31   | • | .32   |
| " Diam'd 1, lb.....                 | ...   | • | .27   |
| " SS, lb.....                       | ...   | • | .27   |
| " TN, lb.....                       | ...   | • | .27   |
| " Garnet.....                       | .24   | • | .25   |
| " Bleached, lb.....                 | .30   | • | .31   |
| Tragacanth, Aleppo, lb.....         | .30   | • | .56   |
| Harlem Oil.....                     | ...   | • | .50   |
| Indigo, lb.....                     | .45   | • | 1.65  |
| Insect Flowers.....                 | .19   | • | .80   |
| Insect Powder, pure, lb.....        | .16   | • | .20   |
| Iodide Potash, bulk, lb.....        | .25   | • | 2.80  |
| " bot's lb.....                     | .28   | • | 2.88  |
| Icinglass, Am'r'n, lb.....          | .47%  | • | .60   |
| Japan, lb.....                      | .35   | • | ...   |
| Juniper Berries, lb.....            | .02%  | • | .03   |
| Leaves.....                         |       |   |       |
| Belladonna, per lb.....             | .00%  | • | .11   |
| Buchu, short, lb.....               | .12   | • | .14   |
| " long, lb.....                     | .25   | • | ...   |
| Coca, prime, lb.....                | .14   | • | .32   |
| Damiana, lb.....                    | .23   | • | .16   |
| Hyocyanus.....                      | .07   | • | .08%  |
| Jaborandi, lb.....                  | .45   | • | .50   |
| Senna Alex natrl, lb.....           | .18   | • | .25   |
| Senna Alexandri, lb.....            | .22   | • | .27   |
| Senna Tinney, lb.....               | .06   | • | .18   |
| Stramonium.....                     | .05%  | • | .08   |
| Licorice, P. & S., lb.....          | .24   | • | ...   |
| Lupulin, German.....                | .45   | • | 1.75  |
| Lycopodium, lb.....                 | .58   | • | .59   |
| Manna, large flake, lb.....         | .35   | • | .90   |
| Small flake, lb.....                | .35   | • | .37   |
| Menthol, Japanese.....              | ...   | • | 4.25  |
| Mercurials.....                     |       |   |       |

|                                       |        |   |       |
|---------------------------------------|--------|---|-------|
| Nitrate Silver, oz.....               | .47    | ● | .48%  |
| Nitrate Soda, 100 lb.....             | 1.81½  | ● | 1.85  |
| Nux Vomica, lb.....                   | .03¾   | ● | .04   |
| Nutgalla, China, per lb.....          | .13    | ● | .13½  |
| Aleppo, per lb.....                   | .14    | ● | .14½  |
| Oils, Essential:                      |        |   |       |
| Anise.....                            | 1.40   | ● | 1.45  |
| Almonda, Sweet.....                   | ..     | ● | 7.50  |
| " Sweet.....                          | .80    | ● | .43   |
| Bay, per lb.....                      | 3.50   | ● | 4.00  |
| Bergamot.....                         | 1.75   | ● | 2.65  |
| Cajuput, Native.....                  | .35    | ● | .45   |
| Camphor.....                          | .07    | ● | .08   |
| Cassa.....                            | .80    | ● | .85   |
| Citronella, Native.....               | .84    | ● | .88   |
| Clove.....                            | .5¾    | ● | .55   |
| Copaiba.....                          | .65    | ● | .70   |
| Croton.....                           | .75    | ● | .80   |
| Cubeb.....                            | 1.90   | ● | 2.00  |
| Erigeron, per lb.....                 | 1.45   | ● | 1.50  |
| Geranium Chiria.....                  | 4.50   | ● | 7.50  |
| Lavender.....                         | 1.80   | ● | 1.85  |
| " Garden.....                         | ..     | ● | 1.60  |
| Lemon, as to brand.....               | .95    | ● | .90   |
| Lemongrass.....                       | ..     | ● | .70   |
| Musk, per lb.....                     | 7.00   | ● | 8.00  |
| Myrrhane.....                         | .17    | ● | .19½  |
| Neroli.....                           | .25.00 | ● | 28.00 |
| Nutmeg.....                           | 1.75   | ● | 1.75  |
| Orange.....                           | 1.40   | ● | 1.65  |
| Origanum.....                         | .84    | ● | ..    |
| Pennyroyal.....                       | 1.00   | ● | 1.10  |
| Peppermint, bulk.....                 | 2.35   | ● | 2.50  |
| " HGH.....                            | ..     | ● | 3.00  |
| Rose.....                             | 7.50   | ● | 8.00  |
| Sandalwood.....                       | ..     | ● | 2.85  |
| Sassafras.....                        | .34    | ● | .37   |
| Sassafras, Artificial.....            | ..     | ● | .25   |
| Spearmint.....                        | 1.50   | ● | 1.80  |
| Tansy.....                            | 2.00   | ● | 3.00  |
| Wintergreen.....                      | 1.55½  | ● | 1.60  |
| " Artificial.....                     | .90    | ● | ..    |
| Wormwood.....                         | 2.15   | ● | 2.25  |
| Opium, Natural, ca, per lb.....       | 2.20   | ● | 2.35  |
| Opium, Ordinary, Jobbing, per lb..... | 2.25½  | ● | 2.40  |
| Opium, Fowl, per lb.....              | 3.00   | ● | 3.10  |
| Phenacetine, per oz.....              | .85    | ● | 1.00  |
| Prussiate Potash, Yellow, per lb..... | .22    | ● | .23   |
| Red, per lb.....                      | .39    | ● | .42   |
| Quicksilver, flasks, per lb.....      | .52    | ● | .54   |
| Quinine:                              |        |   |       |
| Domestic, bulk, oz.....               | .22    | ● | ..    |
| Domestic, oz.....                     | .28    | ● | .29   |
| German, bulk.....                     | .10¾   | ● | .20   |
| German, oz.....                       | .27¾   | ● | .29   |
| Roots, Aconite, lb.....               | .09    | ● | .14   |
| Althea, cut, lb.....                  | .15    | ● | .18   |
| Alkanet, lb.....                      | .06    | ● | .07   |
| Arnica, lb.....                       | .12    | ● | .13   |
| Beladonna Ger., lb.....               | .08    | ● | .12   |
| Blood, lb.....                        | .05    | ● | .06   |
| Calamus, lb.....                      | .07    | ● | .08   |
| Calamus, bleac'd, lb.....             | .21    | ● | .24   |
| Colchicum, per lb.....                | .11    | ● | .14   |
| Colombo, lb.....                      | .06¼   | ● | .11   |
| Dandelion, Germ, lb.....              | .07¾   | ● | .08   |
| Dogwood, lb.....                      | .08    | ● | .10   |
| Galangal, lb.....                     | .04¾   | ● | .04¾  |
| Gentian, lb.....                      | .03¾   | ● | .04   |
| Ginseng, lb.....                      | 2.50   | ● | 3.25  |
| Ginger, Jamaica, bled, lb.....        | .16½   | ● | .17½  |
| Ginger, Jamaica, unbled, lb.....      | .14    | ● | .16   |
| Golden Seal, lb.....                  | ..     | ● | .22   |
| Hellebore, powd, lb.....              | .07¾   | ● | .08   |
| Ipecac, lb.....                       | 1.20   | ● | 1.30  |
| Jalap, lb.....                        | .22    | ● | .30   |
| Kava Kava, lb.....                    | .27    | ● | .30   |
| Licorice, select, lb.....             | .08    | ● | .15   |
| " Pc & d, lb.....                     | .05    | ● | .12   |
| Lovage, lb.....                       | .50    | ● | .55   |
| Mandrake, lb.....                     | .03¾   | ● | .04   |
| Orris, Florentine, lb.....            | .20    | ● | .25   |
| Orris, Verona.....                    | .10    | ● | .14   |
| Pink, lb.....                         | .24    | ● | .30   |
| Rhubarb, whole, lb.....               | .25    | ● | .26   |
| Sarsaparilla, Hond, lb.....           | .28    | ● | .42½  |
| Sarsaparilla, Mex., lb.....           | .09¾   | ● | .10   |
| Senega, lb.....                       | .45    | ● | .47½  |
| Serpentaria, lb.....                  | .20    | ● | .22   |
| Valerian, Belgian, lb.....            | .07    | ● | .07½  |
| " German, lb.....                     | .10    | ● | .12   |
| Saffron, Amn., lb.....                | .32    | ● | .35   |
| Spanish, Valencia, lb.....            | 6.25   | ● | 6.50  |
| Spanish, Alicante, lb.....            | ..     | ● | 4.50  |
| Sal Ammoniac, lump, lb.....           | .06½   | ● | ..    |
| Do., Granulated, lb.....              | .05½   | ● | .09   |
| Sal Soda, Eng., 100 lb.....           | 1.00   | ● | 1.05  |
| " American.....                       | .90    | ● | .95   |
| Saltpeter, crude, per lb.....         | .03¾   | ● | .04   |
| Saltpeter, refined, per lb.....       | .06    | ● | .08   |
| Seeds, Anise, Ital., lb.....          | .12½   | ● | .11   |
| Anise German, lb.....                 | .06    | ● | .06½  |
| Anise, Star, lb.....                  | .22    | ● | .23   |
| Canary, Smyrna, lb.....               | .05¾   | ● | .06½  |
| Canary, Sicily, lb.....               | .00¾   | ● | .04   |
| Caraway, lb.....                      | .06¾   | ● | .06¾  |
| Colery, lb.....                       | .12    | ● | ..    |

|                             |                        |      |       |      |
|-----------------------------|------------------------|------|-------|------|
| Cardamon, Aleppy,           | per lb.....            | .65  | ●     | .75  |
| Cardamon, Malabar,          | per lb.....            | .75  | ●     | .85  |
| Colchicum, lb.....          | .....                  | .12  | ●     | .14  |
| Coriander, lb.....          | .....                  | .05  | ●     | .05½ |
| Cummin, lb.....             | .....                  | .11  | ●     | ..   |
| Fennel, Germ., lb.....      | ...                    | ..   | ●     | .12  |
| Flax Meal, per lb.....      | .....                  | .07  | ●     | .08  |
| Foenugreek, lb.....         | .....                  | .06½ | ●     | .07  |
| Hemp, Russian, lb.....      | .....                  | .03½ | ●     | ..   |
| Mustard, yell. Cal. lb.     | .....                  | .04  | ●     | .04½ |
| Mustard, brewa, Cal.        | .....                  | ..   | ●     | ..   |
| Poppy, per lb.....          | .....                  | .03½ | ●     | .04½ |
| Quince, German, lb.....     | .....                  | .09  | ●     | .10  |
| Rape, German, lb.....       | .....                  | .45  | ●     | .50  |
| Rape, English, lb.....      | .....                  | .03½ | ●     | .05½ |
| Soap, Castile, Mars,        | mottled, pure, lb..... | .06  | ●     | .06½ |
| White, lb.....              | .....                  | .10  | ●     | .10½ |
| Soda Ash, lb., 48½ per      | 100 lb.....            | 1.50 | ●     | 1.80 |
| Squills, white, lb.....     | .....                  | .04½ | ●     | .06  |
| Sugar Milk, powd., lb.....  | .....                  | .10½ | ●     | .11  |
| Sugar Lead, white, lb.      | .....                  | .11  | ●     | .11½ |
| Lead, brown, lb.....        | .....                  | .05½ | ●     | .06  |
| Sulphate Ammonia, per       | 100 lb.....            | 2.50 | ●     | 3.00 |
| Do. Potash, 48½ per         | lb.....                | 1.15 | ●     | 1.15 |
| Do., Potash, 90½ per        | lb.....                | 2.20 | ●     | 2.15 |
| Sulphur, Roll.....          | .....                  | ..   | ●     | .01½ |
| Flour.....                  | .....                  | ..   | ●     | .01½ |
| Spirits Nitre, U. S. P..... | .....                  | .39  | ●     | .60  |
| Spirit Ammonia, Arom.....   | .....                  | .44  | ●     | .45  |
| Sulphuric Ether.....        | .....                  | .54  | ●     | .61  |
| Sumac, Sicily, ton.....     | 75.50                  | ●    | 77.00 | ..   |
| Virginia.....               | 43.00                  | ●    | 47.50 | ..   |
| Tar Barbadoes, gal.....     | .....                  | ..   | ●     | .45  |
| Tin Crystals, bbls., per    | lb.....                | .15  | ●     | ..   |
| Jara, per lb.....           | .....                  | .17  | ●     | ..   |
| Tonka Beans, Angost.,       | lb.....                | 1.70 | ●     | 1.85 |
| Tonka Beans, Para, lb.....  | .....                  | .50  | ●     | .60  |
| " Angostura.....            | 1.70                   | ●    | 1.85  | ..   |
| Turpentine, Spirits.....    | .30                    | ●    | .30½  | ..   |
| Vanilla Beans, lb.....      | 6.00                   | ●    | 13.00 | ..   |
| cut, lb.....                | 4.75                   | ●    | 6.00  | ..   |
| Venice Turpentine, barrels, | lb.....                | .12  | ●     | .10  |
| Cans, lb.....               | .10                    | ●    | .20   | ..   |
| Wax, Brazil, Veg., lb.....  | ..                     | ●    | .53   | ..   |
| Japan, lb.....              | .08½                   | ●    | ..    | ..   |
| Zinc Oxide.....             | .30                    | ●    | .44   | ..   |

|   |      |   |      |
|---|------|---|------|
| Linseed, raw, gal.....                    | .40  | ● | ...  |
| Linseed, boiled, gal....                  | ...  | ● | .43  |
| Lard, City, Prime, present make, gal..... | .75  | ● | .76  |
| Lard, City, Extra No. 1, gal.....         | ...  | ● | .53  |
| Lard, City, No. 1, gal....                | ...  | ● | .43  |
| Lard, West, prime, gal....                | ...  | ● | .78  |
| Cotton-seed, Crude, of grades, gal.....   | .85  | ● | .88  |
| Cotton-seed, Summer                       | ...  | ● | ...  |
| Yellow, prime, gal....                    | .34  | ● | .35½ |
| Cotton-seed, Summer                       | ...  | ● | ...  |
| Yellow, of grades....                     | .31  | ● | .34  |
| Cotton-seed, Winter                       | ...  | ● | ...  |
| Yellow, gal.....                          | ...  | ● | ...  |
| Cotton-seed, Prime                        | ...  | ● | ...  |
| White, gal.....                           | ...  | ● | .48  |
| Sperm, Crude, gal.....                    | .65  | ● | .67  |
| Sperm, Natural Spring gal.....            | .66  | ● | .68  |
| Sperm, Bleached Spring gal.....           | .71  | ● | .73  |
| Sperm, Natural Winter, gal.....           | .71  | ● | .73  |
| Sperm, Bleached Winter, gal.....          | .76  | ● | .78  |
| Whale, Natural Winter, gal.....           | .45  | ● | ...  |
| Whale, Bleached Winter, gal.....          | .48  | ● | ...  |
| Whale, Ex. Bl'ch'd, gal.....              | .49  | ● | .50  |
| Menhaden, Crude, Sound, gal.....          | .33  | ● | .34  |
| Dark, pressed, gal....                    | .31  | ● | ...  |
| Light, pressed, gal....                   | .38  | ● | ...  |
| Bleached, Winter, gal....                 | .44  | ● | ...  |
| Extra Bleached, gal....                   | .43  | ● | ...  |
| Tallow, City, prime gal....               | .50  | ● | .55  |
| Cocconut, Ceylon, lb....                  | .05½ | ● | .05¾ |
| Cochin, lb.....                           | .66½ | ● | .67  |
| Cod, Domestic, gal.....                   | .38  | ● | .41  |
| Foreign, gal.....                         | .42  | ● | .45  |
| Red Elaine, gal.....                      | .44  | ● | .48  |
| Red Saponified, lb....                    | .40½ | ● | .05¾ |
| Bank, gal.....                            | .33  | ● | ...  |
| Struts, gal.....                          | .36  | ● | ...  |
| Olive oil for table in tins.....          | 1.50 | ● | 1.85 |
| Olive, Com'n, bbls, gal....               | .57  | ● | .60  |
| Nutsfoot, prime, gal....                  | .60  | ● | .63  |
| Palm, prime, Lages, lb....                | .60  | ● | .64  |

# American Druggist and Pharmaceutical Record.

A JOURNAL OF PRACTICAL PHARMACY.

VOL. XXIII. No. 23.

NEW YORK, DECEMBER 7, 1893.

WHOLE No. 276.

## AMERICAN DRUGGIST PUBLISHING COMPANY.

37 COLLEGE PLACE, NEW YORK.

A. R. ELLIOTT, PRESIDENT.

|  |        |
|--|--------|
| Subscription Price—For the United States and Canada, - | \$2.00 |
| If paid in advance direct to this office, -            | 1.50   |
| "    "    for Foreign Countries, - - -                 | 2.50   |
| Single Copies, - - - - -                               | .15    |

The "American Druggist and Pharmaceutical Record" is issued on Thursday of each week. Changes of advertisements and all copy for publication should be received before Tuesday of each week.

We are not responsible for any money paid to agents. All remittances should be made direct to this office. Express Orders, Post-Office Orders and Drafts on New York should be made payable to the "American Druggist Publishing Company" and addressed to them at 37 College Place, New York.

*Liberal Commutations to Club Agents.*

## A SWINDLE EXPOSED.

IN our news columns will be found a short account of the operations of a gentleman of suaveness and plausibility who succeeded during the past week in extracting considerable sums of money from the pockets of some too-credulous advertisers by means of the perennial and apparently ever useful "new society for the relief of drug clerks." How any avowedly shrewd men of business can be imposed upon by such schemes passes comprehension. A simple letter of inquiry to any of the drug journals (which are the legitimate advertising mediums of the drug trade) would, in the language of a once noted character have been money in the pockets of the advertisers aforementioned. But many neglected this simple measure of precaution.

From one firm who had the wisdom to consult the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD we are in receipt of a letter in which they say :

We thank you very much for the trouble you have taken to inform us. From the information you give us we think it is hardly worth while investigating any further for the secretary's claim that the association is an important one is already refuted. We thank you for what you have done for us and remain,  
Yours respectfully, O. & W. THUM COMPANY.

Any inquiry into the standing or responsibility of the persons soliciting advertisements was not deemed necessary by some firms, and firms of excellent business reputation too. The blind trust which they reposed in strangers who appealed to their spirit of philanthropy while seeking to extract the dollars in a business like way resulted, as it most always does, in financial loss. For the dupes of the clever swindler who was responsible for the movement we have a certain amount of compassion—sympathy is scarcely deserved.

Of the associations in actual existence which permit the use of their names by advertising agents in the exploiting of organs, proceedings, etc., we may have a word to say in an early number. Meantime advertisers would do well to avoid mixing philanthropy with business. From such a mixture nothing but loss can be looked for.

## LANOLINE IN THE LAW COURTS.

A CASE of considerable interest to pharmacists and manufacturing chemists is at present being tried in the English law courts. We refer to the action brought by the BENNO JAFFÉ & DARMSTAEDTER, LANOLIN FABRIK, of Berlin, against JOHN RICHARDSON & Co., of Leicester, upon the ground of infringement of the lanoline patent. Our English contemporary, the *Chemist and Druggist*, brings an interesting account of the testimony presented up to the fourth day of the hearing of the case, and from this it appears that the defendants are manufacturers of a lanoline-like compound sold under the name of anasalpine, which is alleged to be a compound of lanoline with soft petroleum. The interesting part of the proceedings consists in the claim of the defendants that lanoline as such is not produced as a separate product in the manufacture of anasalpine, although it is apparently not denied that a purified wool fat is a constituent part of it. The plaintiffs seek to restrain the defendants from manufacturing anasalpine for the stated reason that purified wool fat in any form cannot be manufactured without producing lanoline and thus infringing upon their patent rights. In reply to this the defendants have brought forward evidence to show that the discovery of wool fat dates back to very early times, a formula for its preparation having been given in a Treatise on Materia Medica, believed to have been written in the second century of the Christian era by DIOSCORIDES PEDACIUS, a celebrated Greek physician of that period. Professors DEWAR and DUNSTAN have testified for the plaintiffs that lanoline cannot be made from the formula of DIOSCORIDES, the process being insufficient for the extraction of total fat because the use of alkalis is not provided for; hot water alone only separating a small proportion of the fatty matters.

The decision of the court in this case will be awaited with much interest as it bears on a number of important questions of scientific and commercial importance.

## Local Dental Anæsthetics.

[From "Practical Dentistry."]

## NO. I. GELATINIZED CHLOROFORM

Mix equal parts of chloroform and the albumen of an egg, place in a stoppered bottle, and shake. In three hours it will be ready for use.

## NO. II.

|                             |         |
|-----------------------------|---------|
| Pure ether.....             | 3 iss   |
| Menthol.....                | 3 i     |
| Extract of Indian hemp..... | gr. xx. |
| Oil of peppermint.....      | ℥ss     |

Apply to the gum around the tooth.

## NO. III.

|                       |      |
|-----------------------|------|
| Powdered camphor..... | 3 vi |
| Ether.....            | 3 ii |

Apply to the surrounding gum with a plug of cotton wool.

## Applications for Toothache.

[From "Practical Dentistry."]

## NO. I.

The following forms a most efficacious application.

|                       |      |
|-----------------------|------|
| Oil, caryoph.....     | ℥ss  |
| Acid carbol. pur..... | ℥iii |
| Glycerin.....         | ℥vi  |
| Liq. cocci ad.....    | ℥ss  |

Misce. Apply one drop on a small piece of wool to the tooth cavity.

## NO. II.

|                  |      |
|------------------|------|
| Tinct. opii..... | 3 i  |
| Camphor.....     | 3 ii |
| Chloroform.....  | 3 vi |

Solve. Apply on wool to the cavity of the tooth.

## NO. III.

|                  |         |
|------------------|---------|
| Menthol.....     | grs. xx |
| Tinct. opii..... | 3 i     |
| Camphor.....     | 3 i     |

Solve. Apply on wool to the cavity of the tooth.

## NO. IV. TOOTHACHE PELLETS.

|                         |            |
|-------------------------|------------|
| Cocaine hydrochlor..... | grs. viii  |
| Pulv. opii.....         | grs. xxxii |
| Menthol.....            | grs. viii  |
| Pulv. althæ.....        | grs. v     |

Mix and divide into  $\frac{1}{2}$ -grain pellets and keep in a stoppered bottle. One to be inserted in the tooth cavity when in pain.

## NO. V. ASTRINGENT WASH FOR SPONGY GUMS.

|                      |       |
|----------------------|-------|
| Tinct. krameriz..... | ℥i    |
| Glycerin.....        | ℥ss   |
| Aq. rose ad.....     | ℥viii |

Misce. Rinse the mouth thrice daily.

## AMMONIA CLEANSER.

As a specially agreeable and effective adjunct to the bath, the following is recommended in quantity of about a wineglassful to each bath:

|                        |     |
|------------------------|-----|
| Castile soap.....      | ℥iv |
| Borax.....             | ℥ij |
| Carbonate of soda..... | ℥j  |
| Water.....             | ℥j  |
| Ammonia water.....     | ℥j  |
| Eucalyptus oil.....    | ℥j  |

Boil the first four ingredients until dissolved. When cold add the ammonia and oil.

## SULPHUR SKIN LOTION.

[Chemist and Druggist.]

|                       |       |
|-----------------------|-------|
| Zinci sulphocarb..... | 9j    |
| Zinci oxid.....       | 3j    |
| Sulphur præcip.....   | 3j    |
| Carmin.....           | gr. j |
| Aq. coloniensis.....  | 3v    |
| Glycerin.....         | 3v    |
| Aque rose ad.....     | ℥v    |

Triturate the carmine with the sulphocarbolate and the other powders; then add the liquids in their order.

## Notes, Queries, and Answers.

We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.

When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.

**Metals More Costly than Gold.**—J. T. S. Peterborough, asks a list of the metals more costly than gold.

These are cæsium, calcium, barium, cerium, didymium, gallium, indium, iridium, lanthanum, lithium, mobium, palladium, rhodium, ruthenium, strontium, terbium, titanium, uranium, vitrium, zirconium.

**Chemical Ink Eraser.** J. C. D., Bridgeport.—A method of preparing a compound advertised under this name is given in a recent number of the *Scientific American Supplement*, and we take the liberty of reproducing it for your benefit.

Take chlorinated lime 1 pound, thoroughly pulverized, and 4 quarts soft water. The above must be thoroughly shaken when first put together. It is required to stand twenty-four hours, to dissolve the chlorinated lime; then strain through a cotton cloth, after which add a teaspoonful of acetic acid (No. 8 commercial) to every ounce of the chlorinated lime solution. The eraser is used by reversing the penholder in the hand, dipping the end of the penholder in the fluid, and applying it, without rubbing, to the word, figure, or blot required to be erased. When the ink has disappeared, absorb the fluid with a blotter.

**Tomato Catsup.** C. J. L., New York.—The formula given below is taken from a recent issue of the *Confectioners' Union*, whose editors are supposed to be well informed on all matters appertaining to palatable delicacies for the dinner table.

## Tomato Catsup.

|                        |                     |
|------------------------|---------------------|
| Pulp tomato.....       | 50 gallons          |
| Garlic.....            | 8 quarts            |
| Shallots.....          | 8 quarts            |
| Red pimento.....       | 3 quarts            |
| Capsicum.....          | $\frac{1}{2}$ quart |
| Salt.....              | 7 quarts            |
| Ginger (whole).....    | 1 quart             |
| Bay leaf.....          | $\frac{1}{2}$ quart |
| Ginger (powdered)..... | $\frac{1}{2}$ quart |
| Cinnamon.....          | $\frac{1}{4}$ quart |

Boil together for half an hour; rub through a sieve, and finally preserve in bottles.

**"Thick Gum."** G. A. S.—Several formulas for this preparation are extant, the two given below being types:

## Gum paste. I.

|                          |             |
|--------------------------|-------------|
| Gum arabic (picked)..... | 1 lb.       |
| Water.....               | 1 pt. 4 oz. |

Dissolve.

To the thick mucilage thus formed add 1 lb. of white sugar, evaporate by a gentle heat to a very thick syrup, then add the whites of three eggs previously beaten up with a fluid ounce of orange flower water; strain through muslin and continue the heat with constant stirring until of a proper consistence on being cooled.

## Gum paste. II.

|                      |        |
|----------------------|--------|
| Powdered acacia..... | 1 part |
| Powdered sugar.....  | 1 part |
| Water.....           | 1 part |

Dissolve and evaporate by a gentle heat until it thickens. Then add the whites of eggs (about three to each pound of acacia) previously beaten up with orange flower water or other flavoring; strain through muslin and continue the evaporation until it will set readily when cooled.

# News and Notes.

## Wholesale Druggists and the New Tariff.

A representative of the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD called on a number of leading members of the wholesale drug trade to obtain their opinions of the Wilson Tariff Bill. He ascertained that among importers and jobbing druggists generally the proposed changes although leaving much to be desired are regarded as a step in the right direction. Wholesale druggists having fewer foreign interests are, however, not disposed to regard the new bill as one favorable to their interests, especial exception being taken to the replacement of specific duties with ad valorem rates:

**McKESSON & ROBBINS:** John McKesson, Jr., is of opinion with respect to Schedule A that it has been drafted by one who is not well informed on the subject of the American pharmaceutical and chemical industries. He said: "It seems to have been compiled on the principle of 'wherever you see a head hit it.' The substitution of ad valorem for specific duties favors the importation of inferior goods. Take Castile soap as an instance. Under a specific duty only the best grades are imported, while under an ad valorem rate soap adulterated with talc and dirt will be brought in instead. Again, when crops are short and prices high in Europe, the ad valorem duty increases the cost of goods to the disadvantage of the consumer. The greatest argument against ad valorem duties, however, is that they open the door to fraud. The unscrupulous importer will get his goods in cheaper than will the honest merchant."

**LEHN & FINK:** Albert Plaut is more favorably impressed with the new bill and thinks the committee did not go far enough in the matter of changes toward a lower basis of duties. "The trouble with all tariff bills," he said, "so far as the drug and chemical schedule is concerned, is that they are too vague and give rise to differences of opinion as to the intent of the law which in litigation work to the annoyance of the importer. The Wilson bill seems to be no exception in this respect. Another objection to it is that chemicals in the preparation of which alcohol is used have not been treated with exact fairness. The duty to be levied on some of them is not high enough in comparison with the large internal revenue tax. Crude drugs have almost always been on the free list and trade in them is not affected in any way. So far as chemicals and essential oils are concerned the new tariff bill is certainly to be preferred to the McKinley law."

**W. H. SCHIEFFELIN & Co.:** W. S. Merse-  
reau of the firm said: "The changes affecting the drug trade, made by the new tariff bill, are very moderate, and nobody is likely to get hurt if it becomes a law."

**ROESSLER & HASSLACHER:** J. Hasslacher said: "The only fault I have to find with the bill is that it replaces specific duties with ad valorem rates in so many instances."

## Gotham Gossip.

Alfred Hy. Mason, secretary of the firm of Seabury & Johnson, who was indisposed for a few days with a slight cold, has returned to his desk, looking as well as ever.

P. De Loughry, who succeeded Keller & Yager at 821 Seventh avenue (Broadway) last March, is building up a very satisfactory business and is evidently there to stay.

Work is being pushed forward rapidly on Oscar Kalish's new pharmacy in the United Charities Building at Fourth avenue and 23d street. He expects to open about December 15.

Mr. Cable now has charge of the New York city branch of Armour's pharmaceutical department. Mr. Cable was formerly connected with the Chicago office and has also traveled for the company.

John O'Connor, who has been managing Bongartz' old store at No. 581 Ninth avenue, has been held for examination at Jefferson Market Police Court, charged with allowing an unlicensed clerk to fill prescriptions in the store. O'Connor was paroled for examination.

G. A. Otgen, who is now in the drug brokerage business as a member of the firm of Burkhan & Otgen, is a graduate of the Philadelphia College, class of '82, he is extending his acquaintance among the wholesale druggists of the city and may be met any day in the New York drug market. He is one of the few who report business satisfactory.

Miss Cornelia C. Bedford lectures every week on dietary subjects to the nursing staff of the Hudson River Hospital for the Insane at Poughkeepsie. She also lectures and gives practical demonstrations weekly in the preparation of food for the sick and invalids before the staff of the Presbyterian Hospital of this city. Miss Bedford is a daughter of the late Prof. P. W. Bedford.

The "Manhattan Pharmacy" so-called, at 34th street and East River, has proved a failure. It seems the premises in which the pharmacy was located belongs to the Long Island Railroad Co., and objection was made by the latter to the druggist's method of attracting public patronage. The former managers have betaken themselves to a more congenial neighborhood and the store is now vacant.

Walter H. Camp, who was accidentally killed by a passing train at Morris Heights railway crossing, this city, on Friday last, was a nephew of John McKesson, Jr., of the wholesale drug house of McKesson & Robbins. This makes the sixth time in a little over twelve months that death has invaded the McKesson household. The grief of the family at the sudden taking off of this bright and promising youth is most intense. He was 22 years old and a member of Company K, Seventh Regiment.

Albert F. Fuerst, head of the American branch of Fuerst Brothers & Co., dealers in chemicals at No. 2 Stone street, was arrested last Monday afternoon in two civil actions brought by the Bownan-Thompson Company, of Blackburn, England. It is charged that Fuerst, as the American agent of the plaintiff firm, has withheld money which he had received for them and has refused to account for it. In Mr. Fuerst's answer to the charges he declares that the English company owed him

\$60,000. Fuerst was liberated on \$10,000 bail given by himself.

A delectable morsel for the epicure in gossip runs this: An Able and Eminent Gentleman's wishes as to the filling of an important post are almost paramount. He is reserved. A (Sub Rosa) candidate writes asking the A. and E. Gentleman's advice as to his (the candidate's) accepting the office in question. The A. and E. Gentleman thinking the post had been tendered the Sub Rosa candidate, writes a nice letter advising him to accept it, he being eminently fitted therefor. This letter being submitted to the appointing power, the S. R. candidate becomes the Office Holder. It is, no doubt, mere gossip.

Abbey's Theater Pharmacy has an odd window display, which takes the shape of a pile of cases containing Burnham's clam bouillon in bottles. This palatable beverage appears to be the popular Broadway tippie at present, and Allen & Jones are making the most of it. Here is a formula for hot clam bouillon which I extracted from Fred, the soda-water boy: Into a long china mug put as much fresh butter as can be lifted on a ten-cent piece; Burnham's clam bouillon, half an ounce; cream, half an ounce. Then add sufficient hot water to fill the mug, and flavor with celery salt, common salt and pepper.

A party of special guests were entertained on board the new U. S. cruiser New York in the Brooklyn navy yard by the officers on Wednesday afternoon last, and under the guidance of the handsome and courtly surgeon I had the pleasure of viewing that latest exponent of the American shipbuilders' art. The apothecary's quarters occupied by John F. Kilmer, and the sick bay were of course visited, and also the much talked of "operating room." In fitting up the ship a bath and water closet were placed in a room adjoining but not opening into the sick bay (as the ship's hospital is called). Over these, covers told down, forming a table which was designed to be used as an operating table. Ship carpenters have their limitations and aseptic surgery is evidently not within their ken. The total unfitness of the room for the purpose it is intended for is readily apparent to any one conversant with the requirements of such a room, and a change will no doubt soon be made.

## The Souvenir Swindle.

A number of wholesale druggists and merchants, doing business with retail druggists in New York city, have been victimized during the past week by a clever swindler who adopted the old and well worn device of soliciting advertisements for a "Souvenir programme," the proceeds of which were to be used for the alleged purpose of aiding a local association of drug clerks. His method of operating was distinguished by a simplicity and boldness which made it easy for him to secure about \$1,000 from various firms and individuals. Its main features were the organization of a society of drug clerks to bear the imposing title of the "United Pharmaceutical and Drug Clerks' Benevolent Society"; the selection of reputable druggists in business as officers and the hiring of a hall in which was to be held "an annual ball and benefit" for the alleged purpose of improving the condition of drug clerks, etc., etc. The officers

selected for the supposed society were F. M. Cunz, president; Arthur Friedlander, first vice-president; J. G. Patton, second vice-president; J. Edward Hoelz, secretary, and Owen Weatherby, treasurer.

All of the druggists mentioned above evinced surprise when spoken to on the subject, and of course repudiated any connection with the swindler and his alleged benefit society.

Complaints and inquiries have, however, showered in upon them from all quarters, the person operating the scheme having extended his operations to Brooklyn, Jersey City, and many important centers in other States. A few of the leading firms who were approached in the matter refused to take the bait and saved themselves from imposition by communicating with the drug journals, but others neglected to take this precaution and suffered in consequence, and among these latter are such well known firms as Ladd & Coffin, Lazell, Dalley & Co., and F. Huhn.

### The New Law in Kentucky.

Kentucky has a new pharmacy law based upon the old one. The principal changes are embraced in the three following sections:

Sec. 8. It shall be unlawful for any person to retail compounds or dispense medicines or poisons for medical uses within this State without first obtaining a certificate of registration as pharmacist from the State Board of Pharmacy and causing the same to be recorded in the office of the Clerk of the County Court in the county wherein said person proposes to carry on such business.

Sec. 9. The following medicines shall be considered poison within the meaning of Section 10 of this act and shall be sold under the requirements of said section: (1), Aconite (monk's hood) salts, solid and fluid extracts and tincture; (2), acids (not diluted), nitric, sulphuric, chromic, hydrocyanic and muriatic; (3), ether; (4), arsenic and the following compounds and preparations: Acid and its salts, arsenic iodide, Donovan's solution, Fowler's solution, hydrochloric solution, arsenite of sodium, Paris green; (5), belladonna (night shade), root and leaf, atropia and its salts, solid and fluid extract and tincture; (6), bitter almonds and its preparations; (7), hellebore, green, black and white and its preparations; (8), creosote; (9), cohoast, black and blue and their preparations; (10), physostigma (calabar bean), eserine, solid and fluid extract and tinctures; (11), cannabis indicus and sativa and their preparations; (12), cantharides and tincture; (13), croton oil; (14), cotton root bark and its preparations; (15), conium (hemlock), conia and bromo hydrate of conium, solid and fluid extract and tincture; (16), cocaine and its preparations; (17), chloral hydrate; (18), chloroform; (19), cocculus (fish berries) and its preparations; (20), curari or weuri (arrow poison) and its preparations; (21), alectorium (squirting cucumber) and its preparations; (22), hyocyanus (henbane) and its preparations; (23), hydrargyrum (mercury), mercuric chloride, bichloride of mercury ammoniate, chloride of mercury (white precipitate), perchloride, iodide, red and green, oxide, red and yellow, cyanide, yellow sulphate and nitrate of mercury and all of their preparations; (24), nitrate of silver (lunar caustic); (25), ingatue strychnos (bean of St. Ignatius) and its preparations; (26), ergot and its preparations; (27), nux vomica; strychnine, brucia and igasaria, solid and fluid extract and tincture; (28), opium, morphine and its salts, tincture (laudanum, deodorized, acetic and ammoniate), wine, vinegar, solid and fluid extracts, Bailey's sedative, bimeconate of morphine; (29), phosphorus (fox fire) and its preparations; (30), potassium, caustic cyanide and their preparations; (31), ferrocyanide (Prussian blue); (32), poison oak (toxicodendrum) and its preparations; (33), sarine and the fluid extract; (34), scammony and its preparations; (35), sodalium, caustic and arsenite of soda; (36), oil of tansy; (37), oil of pennyroyal; (38), stramonium (Jamestown weed), flower, seed, datura stramonium, solid, fluid extracts; (39), nitroglycerine and nitro-benzol. Proprietary or secret medicines sold or advertised as emmenagogue or parturientes, and all that are known to contain a large proportion of opium or other powerful narcotics.

Sec. 10. Poisons when sold shall bear a label on each package or bottle in a prominent place, on which shall be the following: The word "poison" in large letters, a picture of a human skull and crossbones; the dose for an adult; some practical antidotes for the poison, and the name of the pharmacist selling it. It shall be unlawful for any druggist to sell poison without being satisfied that the buyer is of a lawful age and knows the danger of the poison bought, and that the poison is bought for a

legitimate use. Any druggist retailing poison, before delivering the poison sold, shall cause to be made an entry, in a book kept for that purpose, the name of the poison and the quantity bought, to whom sold, and the address of the purchaser, the purpose for which it is stated by the purchaser to be required, and the date of the sale. Such record shall be kept for five years after the last entry, and is to be open to the inspection of the coroner and courts. Any person failing to comply with requirements of this section shall, upon conviction, be fined \$50 and be liable for all damage done.

## CORRESPONDENCE.

### Ownership of Prescriptions.

To the Editor AMERICAN DRUGGIST:

As to the "Ownership of Prescriptions," I hold that a prescription, in its general sense, is *not* property, and I doubt if any court would hold it as such, should any action be brought to recover the value of one.

Usually the patient does not pay the physician for the prescription, but for advice. If the doctor chooses to prepare his own medicine I don't think any court could compel him to tell what he gave except it was claimed that the patient had received injury from it. The doctor has a right to seal the prescription in an envelope and address it to some particular druggist, when it becomes private correspondence. Because the doctor, not wishing to be partial, leaves the prescription open, that any druggist may prepare it, I hold that it is no less a private matter. The patient has paid for the *advice*, and in order that the patient may procure the materials necessary for following this advice the doctor writes a prescription (letter or communication) to *some* druggist who furnishes the medicine. After he has done so the prescription has fulfilled its mission, and the druggist should retain it as his voucher to prove that the medicine has been properly furnished, and he is not even obliged to give a copy of it unless so ordered by the writer, and I hold that if the physician has such instructions printed on his prescription the courts will sustain him, for the physician is supposed to be the only person qualified to judge if it is advisable or judicious for the patient to have the prescription, or even a copy of it, returned to him. Of course, in any case where the *prescription* itself was bought it alters the complexion of the case, as it then becomes property.

GEORGE A. STUART.

OYSTER BAY, N. Y.

### Reciprocal Registration—A

Reply to L. R. H. R. Slack.

To the Editor AMERICAN DRUGGIST.

When the knight errant of yore buckled on his armor and girded his loins with the sword, he went out to attack injustice and defend the right. Thus when I sharpen my pencil and criticise what appear to be evils I do it not in the spirit of the lawyer who starts out to win his case right or wrong, but to assist in my humble way in discovering the truth and bringing about necessary reforms. The movement started, I am generally content to look on while others continue the fighting.

Thus, possibly, I should pay no attention to the paper of Dr. Henry R. Slack attacking my position on the question of reciprocal registration (published in the A. D. and P. R. of May 18, 1893, page 308),

which was reproduced in a recent issue of this journal, were it not that he questions my democracy, my right conception of state sovereignty.

That is a thrust which hurts! Dear me! if there is anything in the world on which I do pride myself, it is my correct understanding of, and consistent fealty to state sovereignty, so much so, indeed, that had I been born south of "Dixie" line me fears I might possibly this day fill a rebel's grave instead of indicting these lucubrations.

The greatest fault of Dr. Slack's paper is that it neither contradicts my assertions nor supports the plea for reciprocal registration by any argument whatsoever. For those reasons reply were unnecessary but that there are always readers who do not take time to analyze, but are caught by phrases that seem plausible on their face.

The main attack in the paper under discussion is, I may be pardoned for saying, much like the famous onslaught Don Quixote made on the windmill, unawares that he was giving battle to an imaginary enemy.

Dr. Slack has gone to much trouble collecting statistics with regard to the "younger" and "older" boards of pharmacy. Nowhere in my article have I alluded to the time of existence of these; I speak of the "weaker" boards only, and put them down as "quite a number." Hence statistics as to proportion or average age are valueless unless accompanied by the *names* of the boards having adopted the New Orleans resolution.

As to the "age" of the Georgia pharmacy board, placed by Dr. Slack as 70 (?) years, thus enormously increasing the "average age" of boards favoring reciprocity, it may in passing truthfully be said that no person now living had heard anything of its existence until our very able and pushing friend Slack made his appearance on the scene, which was somewhere this side the year 1881.

We are also told that while 14 out of 36 boards of pharmacy have adopted the New Orleans resolution, 19 (or perhaps 24) boards favor reciprocity. Are we to understand that every one of the members of those 19, respectively 24, boards have answered each for himself, or have single individuals spoken for other members of their respective boards; if the former, why do they not act upon the faith that is in them?

Where, again, did I claim that "younger and weaker" boards seek dignity in recognition by "older and more conservative" boards; or where did I assume that the importance of a pharmacy board certificate of a territorially small State is enhanced by being recognized in a State large in comparison? Also, it was the State Pharmaceutical Association, *not the Board*, which brought about the change alluded to in the Colorado pharmacy law. My critic certainly must have read my article hurriedly, else he could not have offered to combat assertions which do not exist. Also, I would ask him is it such a crime to be "progressive" and to make for the elevation of the standard of pharmacy in one's own State by enacting laws (as Georgia has done) or amending the same (as in the case of Colorado), so that incompetents may be kept out of the ranks?

Surely, Dr. Slack did not mean that! The "desire" of some boards, to have

reciprocity in registration is the best reason for forbidding it in the law.

But what does he mean when he speaks of one State of the union as a "civilized nation" as opposed to another State, also a "civilized nation," between which treaties shall be made in all equity? Is this Dr. Slack's idea of "state sovereignty?" I thought these United States were a nation in which local interests are taken care of by the several communities subdivided into states, counties, towns, municipalities and wards, each subdivision being supreme in its proper domain, a central government directing the welfare of the whole. If so, why talk of "foreign nations?"

One more word and I have done. Dr. Slack commends the plan adopted by the Arkansas board. What is this plan? The applicant presenting for approval a certificate of registration from another State board may produce the questions propounded together with his answers, and on the showing of this the Arkansas board decides whether his evidence of eligibility is "satisfactory" or not. Truly, no sane man, though he be opposed to the New Orleans plan; can make objection to such an arrangement. *C'est tres different!*

And now, if in the future friend Slack will promise to confine himself more closely to the text and leave out of consideration "staats examen" and state sovereignty, I will forgive him this time and agree not to say another word on reciprocal registration for a long time.

ETHELWOLF FOWLER.

CHICAGO, ILL.

## OBITUARY.

GEORGE KEMP.

George Kemp, a member of the firm of Lanman & Kemp, wholesale druggists, New York, died on Thursday, November 23, at his residence in this city.

The direct cause of his death has not yet been determined, although for the last few years Mr. Kemp had been a sufferer from an acute disorder of the stomach, which some months ago developed into pronounced malnutrition.

In spite of his rugged constitution and the best of medical aid and attention he sank rapidly, and shortly after daybreak on Thursday morning he breathed his last.

Mr. Kemp was sixty-eight years old, and for fifty years had been identified with the business interests of this city. He made an immense fortune in the manufacture and sale of perfumery and toilet waters. The trade of his firm extends all over the world.

His wealth is estimated at upward of \$7,000,000.

Dr. John A. Gladden died at his home in Morgan, Ga., at 2 o'clock P.M., Sunday, November 12, after a severe illness of twelve days. He was one of the most prominent physicians of this part of the State. He had a successful mercantile and drug business at this place, and large farming interests near by. He was public spirited, charitable and great-hearted.

E. F. Stephan, for many years a druggist on Jersey City Heights, and lately of Central avenue, died suddenly on Friday, Nov. 17.

## Trade Notes.

Do you want an interesting little book on beauty and how to keep it?

If so write to Schulze-Berge & Koechl, 77 Murray street, New York city, for a free copy.

Dean, Foster & Co., druggists' sundries men, of 14 and 16 Blackstone street, Boston, and 120 Lake street, Chicago, issue a monthly circular making special offers on druggists' sundries, both standard lines and goods to sell at popular prices. It will perhaps be to your advantage to have your name placed on this list. Write to Dean, Foster & Co., mentioning this paper.

An excellent little manual of entertainment for the long nights of Winter has been issued from the press of W. S. Trigg, publisher, 149 Duane street, New York, under the title "The Wizard's Manual." It contains full information regarding the different tricks of conjurers and will be found serviceable as a guide to the popular parlor tricks. The "Wizard's Manual" is altogether an excellent investment for the holiday season, and its low price (25c.) places it within the reach of all.

A. D. Puffer & Sons, 38 to 48 Portland street and Sudbury Square, Boston, Mass., and 39 to 41 Center street, New York, have issued an illustrated catalogue of bottling machinery and supplies, in which they call attention to the numerous bottling machines and accessories for which the firm of A. D. Puffer & Son is so justly celebrated. The catalogue contains some 100 pages of printed matter and illustration on super-calendered paper and includes mention of bottling sets, bottle washers, carboy stands, corking machines, engines and engine boilers, generators, pumps, syrup cans, and numerous other requisites for the soda water trade. A copy of this catalogue can be obtained by any druggist for the asking.

Much of the success of a pharmacy depends upon its appearance; if the fittings be artistic and designed in accordance with some well defined rule of architecture the result is pleasing. Druggists who are interested in new designs in drug store fittings, prescription desks, glass showcases, etc., should consult a manufacturer who makes a specialty of such work, and who appeals directly to the drug trade. A manufacturer answering these requirements is to be found in Charles P. Whittle, of 35 Fulton street, Boston. His illustrated catalogue of designs in store architecture, prescription desks and glass showcases is an excellent guide in the selection of store fixtures, and as copies can be had for the asking every druggist should have one. Write to Charles P. Whittle, 35 Fulton street, Boston.

## Famous Portsmouth Specialities.

A recent issue of the Portsmouth, N. H., *Board of Trade Journal* contains an interesting account of Preston's Pharmacy and its proprietors, Andrew P. and Frank S. Preston. Preston's Pharmacy, as it is known in Portsmouth, was established by William R. Preston, father of Andrew P. Preston, its present proprietor. The pharmacy is situated on Congress street,

and few indeed of New Hampshire's Summer visitors have not visited it. The more prominent of the "Famous Portsmouth Specialities" are the "1838" Cologne, The Portsmouth Orris, Stedman's Tu-tha-lin (a liquid dentifrice), The "1880" Tooth Powder, The Portsmouth Cologne Salts, and The Portsmouth Cold Cream. Preston's Jamaica Ginger is a household remedy, and Tobin's Family Liniment, and other preparations of The Nye Chemical Company, are controlled by Andrew P. Preston.

## Notes on Prices.

### New York Prices.

W. H. Raser, drug broker, of 32 Platt street, New York city, issues the following circular under date of November 29:

Trade is fairly active in a jobbing way. Considerable business has been done during the past few days in quinine, and 19½c. spot cash is now the very lowest figure named, with 19¼c. cash or 19¼c. regular 30 day account generally asked. Holders are manifesting little desire to sell at these figures, believing that an advance on the part of domestic and foreign makers will soon be announced. Opium is the dulllest article on the list at present, and single cases are freely quoted at \$2.20, though it is believed that an offer of \$2.15 would not be rejected. Broken parcels at the usual advance on case price. Pure budding opium bulk at \$3. For a round lot of, say, 50 lbs. or more, this might be shaded a trifle. Some predict an early reaction, believing there is not sufficient cause for the present "slump." Morphine unchanged. Balsam copaiba has further advanced; 35 and 36c. now lowest for prime goods. Balsam tolu is firmer. Castor fiber is very scarce at \$20 to \$22 asked. Camphor: I have been filling orders recently at 44c. in barrels from an outside lot, but this source of supply is almost exhausted and refiners are firm at 45c. Cod liver oil is advancing, and prime Norwegian new is held at \$20 for single barrels and \$19.50 for 5 or 10 bbl. lots and old oil at \$19. Ergot is dull and easy. Cotton seed oil has declined. Oils anise and cassia are higher. Oil winter-green true is lower. Lemon and bergamot are easy at unchanged figures. Peppermint has further advanced. HGH oil in glass cannot now be had under \$3 with more asked. Ipecac root: this market has suddenly reacted under cable advices of an advance to 6 shillings in London, and is now quoted here at \$1.25 @ \$1.30, with a higher tendency. Mexican sarsaparilla is scarce at 10½ to 11c. Salicine has advanced \$1.65 @ \$1.70. Celery seed is easier at 16 @ 17c. Coriander has further advanced to 5¼ @ 5½c. for unbleached, and 5¼ to 6c. for bleached seed. Canary seed, Smyrna, is firm at 2¼c. Sicily canary is still to be had at 2¼ @ 3c. as to quality and quantity. Russian hemp seed is now in more liberal supply and is obtainable on spot at 2¼ @ 3c. and to arrive at 2¼c. Crude brimstone: an advance is reported from Sicily and refiners here are less disposed to name the large discounts that have prevailed for some time past. Juniper berries are tending higher. Gum chicle is lower. Chlorate of potash is dull. Prussiate potash, yellow, has again been advanced to 20¼ @ 21¼c. as to quantity; single cask lots are yet obtainable at 20¼ @ 21c. Oxalic acid casks at 6¼c. and 5 cask lots at 6c. Spices, little change to note.

## CHEMICALS.

In the monthly circular of Powers & Weightman and Rosengarten & Sons, manufacturing chemists, Philadelphia, issued under date of December 1, the following articles are marked lower, viz.: Acetanilid, acid citric, alum, powdered, amyl acetate, codeine (salts of), Lunar caustic, morphine and its salts, croton oil, potassium chloride, quinine (pure alkaloid), Rochelle salts, seidlitz mixture, silver nitrate. Advances: sweet spirit of nitre, sulphuric ether, washed ether, stronger ether, Hoffman's anodyne, hydrogen peroxide.

## Review of the Wholesale Market.

NEW YORK, November 29, 1893.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

The distribution of drugs, dyestuffs and chemicals during the week under review has been, if anything, below the usual proportions of the season. In the aggregate, however, the general movement of stock is fairly satisfactory and there is evidently manifested a greater disposition to take up round lots and replenish depleted stock. Prices on most lines are maintained with a fair degree of steadiness. Opium remains weak, quinine is firm and menthol is stronger. Ipecac has improved. Bromides have advanced 2c. Other price changes have been chiefly in buyers' favor.

## DRUGS.

ALCOHOL, grain and wood, are without important change; about the usual demand is experienced.

BALSAM COPAIBA has continued in moderate request at the recent advance to 38 @ 40c.

BALSAM PERU is in active jobbing demand at \$1.45 @ \$1.50.

BARKS.—Cascara Sagrada is inquired for in a limited way; prices are nominal, however, and quotations stand at 6 @ 6½c. Soap is lower abroad and weak here. Jobbing lots bring 4¼ @ 4½c., but 4c. will buy in a large way.

CANTHARIDES continue to meet with fair attention and prices are firm at 28 @ 30c. for Chinese, whole, and 32 @ 35c. for powdered as to quality.

CASSIA BUDS are in light supply with 18¾ @ 19c. the quoted range.

CASTOR OIL reflects a steadier tone in view of reports of a short bean crop. Best grades are quoted 14¾ @ 15c. for barrels and 15 @ 15½c. for cases. No. 3 is held at 11½ @ 12c. for barrels and 12 @ 12½c. for cases.

CASTOREUM is still scarce and high; there is little to be procured at the quoted figure of \$24.

CIVET is tending higher and is now quoted \$5.

COD LIVER OIL, Norweigan, continues to improve in tone; numerous sales at \$19 @ \$19.50. It has advanced abroad.

DAMIANA LEAVES are easy, the nominal quotation being 13c.

ERGOT, German (Russian), offers more freely and the market appears more easy in tone, offers to sell being made at 26 @ 30c. For Spanish 33 @ 36c. is asked.

JABORANDI LEAVES are finding sale in a small way at 45c.

JUNIPER BERRIES are held firmly at the quoted range of 2½ @ 2¾c.

MENTHOL is yet in strong position and \$4.50 is quoted as inside.

MORPHINE is unchanged, but values are

a trifle unsettled owing to the present status of the opium market.

OPIUM continues weak and unsettled, the market being greatly depressed, though prices have not yet receded to the level of the figures which ruled at the corresponding period of last year. Case lots are now offering at \$2.12½, but it is said a firm bid of \$2.10 might result in business. Jobbing lots are held at \$2.17½ @ \$2.20. Powdered is quoted nominally at \$3 @ \$3.10, but these figures can be shaded on a firm bid.

QUININE appears to be attracting increased attention, the demand showing a perceptible improvement within the past few days. About 10,000 ounces of foreign have been disposed of second hands in this period at 19½ @ 19¾c. The demand for domestic makes is reported as brisk.

SAFFRON, American, is scarce and commands 38c.

ST. IGNATIUS BEANS are very scarce and none is to be had below 48c.

SAGE, Italian, is in fair seasonable demand and we are reported sales of some 30 bales, including both picked and unpicked, at 6¼c. for the former and 5¼c. for the latter.

WITCH HAZEL EXTRACT.—Interesting developments are looked for in the witch hazel extract market. One of the new comers among the producers—a firm which is reported to have practically unlimited capital—is making things lively for competitors and what the outcome may be is difficult to predict.

YERBA SANTA is easier, and offered at 6c. to arrive.

VANILLA BEANS are very firm under short supplies and a good demand. We are reported sales of 100 lbs. within the range of \$6.50 @ \$13.

## DYESTUFFS.

CUTCH of the better grades is finding a good outlet in a jobbing way at 4¾ @ 4½c.

GAMBIER is finding purchasers in a limited way at 3.90 @ 4¼c. spot.

LOGWOOD has sold during the week to the extent of 900 tons within the range of \$34 @ \$36.

NUTGALLS, blue Aleppo, are held at 14 @ 14½c. with a moderate distribution within the range.

SUMAC, Sicily, is scarce on spot and little is offered to arrive. We quote the range as under: Spot and to arrive \$75.

## CHEMICALS.

AMMONIUM BROMIDE has advanced 2c. per lb. with the other bromide salts. Quoted 47 @ 48c.

BRIMSTONE comes higher from primary sources, having advanced 25c. per ton in Sicily. Best seconds for shipments are now held at \$17.50 @ \$17.75. Goods on the way are quoted at \$18.25 @ \$18.50.

BLEACHING POWDER is firm, but there is a scarcity of hard wood packages. Second hands are well supplied with stock in soft wood.

CITRIC ACID is tending firmer and cannot now be obtained at less than 44c.

CREAM TARTAR is offered in single barrels from second hands at 18½c.

CHLORATE OF POTASH is in moderate jobbing demand at the previous range, but no interest of a speculative character appears to be manifested.

NITRATE OF SODA continues dull and without special features of interest. Future shipments are quoted \$1.77½, while spot goods are held at \$1.80.

PRUSSIAN POTASH has advanced in sympathy with quotations at primary sources and the revised prices are 24½c. on contracts for 15,000 lbs. or over, and 25c. on ordinary lots.

ROCHELLE SALT is easier, jobbing lots being now procurable at 19c. in barrels, and 20c. in boxes.

SEIDLITZ MIXTURE is quoted at 15 @ 16c. in barrels and boxes respectively.

SODIUM BROMIDE has been marked up 2c. to correspond with other bromide salts. We quote the range at 42 @ 43c.

## ESSENTIAL OILS.

ANISE does not vary, \$1.40 @ \$1.45; consumption is fairly active at this range.

CASSIA has not changed during the interval; 85 @ 90c. is asked, but only jobbing parcels are wanted.

CLOVE continues held at 52 @ 60c., but the demand is small and unimportant.

LEMON is easier and now quoted \$1.30 @ \$1.80 as to brand and quality.

ORANGE continues to reflect an easy market though without quotable change.

PEPPERMINT is in strong statistical position, but sales during the week were largely of a jobbing variety. Wayne County offers at \$2.55 @ \$2.65, and Western \$2.45 @ \$2.50. HGH is quoted \$3 @ \$3.10.

## GUMS.

ALOE are without new or interesting feature.

CAMPHOR is meeting with some attention from out of town holders. Second hands we hear of offers to sell at 44c.

CHICLE is firmer, holders now wanting 25c.; sales of 40,000 lbs. at 25c.

SHELLACS are quiet but firm at the quoted range.

TRAGACANTH is firm in view of recent advances abroad, but the market is quiet.

## ROOTS.

ALTHEA has advanced at the source of supply, but this market is quiet at 16 @ 18c. for prime white.

IPECAC continues to feel the effect of the disturbed conditions existing in Brazil, and has been steadily advanced in the London market. Prices here follow, and now stand at \$1.40 @ \$1.45 according to quality, quantity and holder.

KAVA KAVA has weakened under the reports of full supplies, and may be had to arrive at 17c. for jobbing lots.

SARSAPARILLA, Mexican, is still held firmly and is in scant supply. One lot of 12 bales which came to hand recently is sold. Jobbing lots bring 10¾ @ 11c.

SERPENTARIA on the spot is held at 30 @ 35c. though no business is reported. Supplies are offering from out of town for bids.

## SEEDS.

CANARY is rather firmer at 2¾c. asked for Smyrna and 2½c. bid, on account of the higher cables from abroad.

CARDAMOMS are active and firmer at 60c. for Allepy's is of good quality.

CARAWAY is easier under diminished inquiry and offering at 6¾ @ 6½c.

CELERY has advanced and is held firmly 17½ @ 18c.

HEMP is in active demand at 2½c. bid and 2¾c. asked and with considerable sales within the range.

MUSTARD, California yellow, has advanced under the active demand and closes at 4c. for spot. Advices indicate a strong position on the Pacific coast.

POPPY is somewhat easier and selling in round lots at 6 @ 6½c.

## GLASS.

The dissolution of the Plate Glass Manufacturers' Association, according to *The Iron Age*, has resulted in an open market, and manufacturers of American plate glass are in a position to accept orders at

any price they may individually choose. There is a reported decline in prices from factory of 20 per cent. American window glass is being sold from factory at 85 and 20 per cent. discount for single strength, and 85 and 20 and 5 per cent. discount for double strength. In face of a declining market something like 200 additional pots are reported as having gone into operation since our last report. French window glass is still quoted at 75 and 10 and 5 to 80 and 5 per cent. discount. It is too early to surmise what reduction the proposed tariff would make in the selling price of imported glass, or to what extent it would affect American glass manufacturers.

### An Old Firm Reorganized.

On November 29th the firm of H. W. Williams & Co., of 20 College place, New York City, was dissolved, Henry W. Williams, retiring, and the business passed into the hands of C. G. Bacon & Co. The new firm is composed of C. G. Bacon, C. Graham Bacon, Jr., and Frank D. Otis.

Mr. C. Graham Bacon, Jr., who will give his active personal attention to the supervision of the business, has been a partner in the firm of H. W. Williams & Co. for the past year and previous to that had been very successful in launching proprietary articles.

Mr. Frank D. Otis was also a member of the old firm and has been identified with the house through all its changes for the past seventeen years. Associated with the new firm is Mr. Charles E. Lovett, who has been so long and favorably known to the drug trade through his connection with Fraser & Lee and Williams, Stiger & Co., and the energy, enterprise and ability so signally displayed by him with the old firm of Fraser & Lee will no doubt prove powerful factors in building up the business of the present firm.

C. G. Bacon & Co. propose to follow out in many respects the policy and methods which proved so signally successful with their predecessors, Fraser & Lee, and ask of our readers merely an opportunity to prove the strength of their position by means of filling a specimen order.

In retiring Mr. Henry W. Williams speaks for his successors the best will and patronage of the friends and patrons of the old firm.

### Michigan Matters.

M. S. Goodman, secretary and treasurer of the Hazeltine & Perkins drug house, Grand Rapids, Mich., has resigned and will engage in other pursuits. He is succeeded by M. B. Hazeltine, son of the president and principal stockholder, Dr. C. S. Hazeltine.

George Morris, a clerk in C. H. Woods' drug store, 534 Grand River avenue, Detroit, was handling a bottle of peroxide of hydrogen recently, when the jar exploded, filling the store with fumes and bits of shattered glass. Morris was severely cut about the hands.

Edmund Leidnitz, partner in a drug store at 1374 Michigan avenue, Detroit, was tried in the police court last week for dispensing drugs without holding papers as a registered pharmacist. The defendant was found guilty and was fined \$25 and costs. The complainant was John Hikok, attorney for the State Board of Pharmacy at Flint, Mich. The case may be appealed.

Franklin P. Richards, a druggist of Detroit, Mich., has assigned to Thomas Hislop. The assets amount to about \$1,200 and the liabilities to \$611.75.

### Boston Budget.

Dr. H. L. Bowker has appeared before the ballot commissioners a number of times recently as a remonstrant against alleged illegal acts of the ward officers in his district.

Messrs. S. W. Wyeth and E. Post, of the firm of John Wyeth & Bros., have been in Boston in the interest of their concern. On the return trip they made a short stop in Providence, R. I.

Albion Trowbridge, bookkeeper for Cutler Bros., 89 Broad street, met with a severe accident recently. While in the act of boarding a train he fell and sustained a severe fracture of the ankle. He will be confined to his house for several weeks.

Albert C. Smith, of Smith, Benedict & Co., is to have his name on the official city ballot, although it was feared at one time that its appearance on that document would be prevented by errors on the part of the caucus officials.

January 1, 1894, will mark the breaking up of the trio of wholesale drug stores which have so long been a feature of the lower part of Washington street. On that date Carter, Carter & Kilham will have abandoned their present location, and will be ready for business at their new establishment, 20 to 38 Merrimac street.

The evening of November 28 was the time of the meeting of the Boston Druggists' Association, and the place was Young's Hotel. The principal guests present were S. W. Wyeth and E. Post, of John Wyeth & Bros., Philadelphia. Theodore Metcalf, Dr. Thomas L. Jenks, Amos K. Tilden, Geo. H. Ingraham, Henry Canning, John A. Gilman, Wm. A. Chapin, Ph.G., Prof. Geo. F. H. Markoe and Thomas Doliber, Ph.G., were some of the members present. Edgar F. Billings, of Billings, Clapp & Co., was elected to membership, and Albion R. Clapp, of this firm, was selected as representative to the Boston Associated Board of Trade. Prof. James F. Babcock was the speaker of the evening and he chose for his subject "Pen, Ink, and Paper." The subject was treated historically, writing and writing materials in all ages and countries being explained. About 75 stereopticon pictures which the professor had

gathered from original sources were used for illustration. The sketch was an interesting one and was duly appreciated by the auditors.

The Alumni Association of the M. C. P. held its second Winter meeting at the college building on the evening of November 27. Secretary Scoville presided, and introduced Prof. Marshall L. Perrin, Ph.D., professor of Germanic languages in Boston University, who talked informally upon "Student Life in Germany." Prof. Perrin's knowledge of this subject was gained by many years' residence in Germany, both as pupil and teacher, and his experiences formed the basis for the interesting insight of this question which he gave.

President Lowney, of the Walter M. Lowney Co., believes that the tariff on refined sugars should not be decreased and fails to see any benefit to be derived from further reduction. In an interview upon this subject he said:

"If the price of sugar is reduced by only one-half of 1 per cent. it would reduce our profits, strange to say, because our customers would demand a reduction on our goods of at least 1 per cent. We got little better prices for our goods when sugar was 6 and 8 cents a pound.

"We manufacture nothing but fine confectionery, our specialties being chocolates and bon-bons. Now, as a matter of fact, and contrary to the general belief, sugar is of minor importance in the manufacture of these goods. For instance: We pay 7 cents a pound specific duty on almonds and 6 cents a pound for shell walnuts. Now, I can see no reason for this as far as protection is concerned, when you consider that there is but a very few pounds of almonds, good for such a purpose, grown in this country."

Thanksgiving time the Mellin's Food Co. observed the custom which has been in vogue during the whole of their business career. It was the presentation to every employee of the company of a fine turkey. No discrimination was made as to sex, age and condition, the oldest employee and the errand boy, the married and the single participating in this pleasant observance.

Joseph B. Locke, Ph.G., of "nervease" fame, is attracting attention to his specialty in a downtown store. He has secured one of Carter, Carter & Kilham's windows, and in it he has placed a large quantity of this preparation which he has placarded in a successful manner. In the center of the window is a small table, and behind it sits a young lady of prepossessing appearance, whose duty it is to fold the powders which are sold under the above name. The exhibit is a pleasing one and fully merits the notice which it receives from passersby. Mr. Locke is also in attendance when not occupied with duties at his store on Shawmut avenue.

C. G. BACON. C. GRAHAM BACON, JR. & FRANK D. OTIS.

**C. G. BACON & CO.,**

— Successors to —

Fraser & Lee,

Williams, Stiger & Co.,

H. W. Williams & Co

**Wholesale Druggists**

— AND —

**Manufacturing Chemists.**

20 COLLEGE PLACE,

NEW YORK CITY.

# ORIGINAL PACKAGE PRICES.

It should be understood that the prices quoted in this column are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a considerable range of prices.

## Drugs, Chemicals, &c.

|                             |       |       |
|-----------------------------|-------|-------|
| Acetanilid, bulk, per lb.   | .34   | .35   |
| " " " " " "                 | .34   | .35   |
| Acetic acid, per oz.        | .013  | .013  |
| Acetate of lime:            |       |       |
| Brown, per 100 lb.          | .90   | .95   |
| Gray, per lb.               | .013  | .013  |
| Acids:                      |       |       |
| Acetic Com'l pr 100 lb.     | 1.87  | 2.13  |
| Aqua fortis, 36 deg.        | .03   | .03   |
| " " " " " "                 | .03   | .03   |
| Benzole, German.            | .47   | .54   |
| " " " " " "                 | .47   | .54   |
| Boric acid, whole.          | .13   | .14   |
| " " " " " "                 | .13   | .14   |
| Citric, American.           | .44   | .46   |
| " " " " " "                 | .44   | .46   |
| Carbolic Crystals.          | .13   | .17   |
| lb. bottle.                 | .80   | .82   |
| Muriatic, 18 deg.           | .85   | 1.25  |
| Nitric, 36 degrees.         | .02   | .04   |
| " " " " " "                 | .04   | .04   |
| Oxalic, English.            | .06   | .06   |
| " " " " " "                 | .06   | .06   |
| Picric.                     | .86   | .86   |
| Salicylic.                  | 1.00  | 1.22  |
| Sulphuric.                  | .70   | 1.00  |
| Tartaric, Crystals.         | .24   | .23   |
| " " " " " "                 | .24   | .23   |
| Tannic.                     | 1.05  | 1.20  |
| Alcohol, Grain, per gal.    | 2.24  | 2.28  |
| (Less rebate.)              |       |       |
| Wood, 95%.                  | 1.00  | 1.05  |
| Alcohols:                   |       |       |
| Alum, Lump, per 100 lb.     | 1.75  | 1.75  |
| Ground, per 100 lb.         | 1.80  | 1.80  |
| Antifebrine, per oz.        | .19   | .20   |
| Antipyrine, per oz.         | 1.20  | 1.40  |
| Arrow root, Berm., lb.      | .24   | .25   |
| St. Vincent, in bbl., lb.   | .11   | .11   |
| Arenic:                     |       |       |
| Red Saxon, lb.              | .05   | .06   |
| White.                      | .03   | .03   |
| Balsam, Copaiba, lb.        | .38   | .40   |
| Fir, Canada, gal.           | 3.00  | 3.25  |
| Fir, Oregon, gal.           | .70   | .70   |
| Peru, lb.                   | 1.35  | 1.50  |
| Tolu, lb.                   | .24   | .25   |
| Bark, Buckthorn, per lb.    | .07   | .09   |
| Cascara Sagrada, lb.        | .06   | .06   |
| Elm, lb.                    | .10   | .11   |
| Orange peel.                | .06   | .07   |
| Sassafras, per lb.          | .06   | .07   |
| Soap, lb.                   | .04   | .04   |
| Bicarb. Soda, Engl., lb.    | .03   | .03   |
| domestic, lb.               | .03   | .03   |
| Bichromate, Pot'h, lb.      | .10   | .11   |
| Bismuth, Sub. Nit.,         |       |       |
| per lb., bulk.              | 1.95  | 2.00  |
| Bismuth, Sub. Carb.,        |       |       |
| per lb., bulk.              | 2.25  | 2.30  |
| Bleach'g Powd., per lb.     | .08   | .08   |
| Blue Vitriol, lb.           | .03   | .03   |
| Borax, refined, lb.         | .07   | .08   |
| Concentrated, lb.           | .07   | .08   |
| Brimstone, best ad, ton     | 19.00 | 19.50 |
| Bromide Potash, Do-         |       |       |
| mestic, b'l'k, lb.          | .37   | .38   |
| bottles, lb.                | .45   | .46   |
| Bromide Ammonium,           |       |       |
| bulk.                       | .45   | .46   |
| Bromide Sodium, b'l'k.      | .45   | .46   |
| Bromine, bulk.              | .43   | .45   |
| Burgundy pitch, per lb.     | .02   | .02   |
| Cacao Butter:               |       |       |
| 12-lb. boxes, lb.           | .32   | .34   |
| Dutch A., per lb.           | .33   | .34   |
| Caffeine.                   | 1.90  | 2.25  |
| Camphor, red'd, bbls, lb    | .45   | .48   |
| cases, lb.                  | .46   | .48   |
| Cantharides, Chinese, lb.   | .70   | .75   |
| Russian, lb.                | .70   | .75   |
| Carb. Ammonia.              |       |       |
| casks, lb.                  | .08   | .08   |
| Cassia Buds, lb.            | .18   | .19   |
| Castor Oil, cases, lb.      | .15   | .15   |
| Barrels, lb.                | .14   | .15   |
| Caustic Soda, 70%, 100 lb.  | 2.80  | 2.87  |
| Caustic Soda, 60%, 100 lb.  | 2.90  | 3.10  |
| Chalk, Engl. Precip.,       |       |       |
| bulk, lb.                   | .04   | .06   |
| Chloral Hydrate Cryst-      |       |       |
| als, bulk, per lb.          | .05   | 1.10  |
| Hydrate crusts, bulk,       |       |       |
| per lb.                     | .90   | 1.05  |
| Chlorate Pot. Cryst., lb.   | .14   | .14   |
| Pow'd, lb.                  | .14   | .15   |
| Chloroform, Bulk, lb.       | .50   | .55   |
| Cinchonidine, Sulphate      |       |       |
| of, German, oz.             | .02   | .02   |
| Citrate, U. S. P. Iron, lb. | .59   | .59   |
| Soluble.                    | .55   | .55   |
| Iron and Ammonia, lb.       | .50   | .50   |
| Iron and quinine.           | 1.50  | 1.55  |
| Iron and strychnine.        | 2.00  | 2.05  |
| Phosphate, U. S. P. lb.     | .57   | .57   |
| Pyrophos, U. S. P., lb.     | .55   | .55   |
| Pyrophos, Soluble, lb.      | .55   | .55   |
| Potash, per lb.             | .49   | .49   |
| Soda, per lb.               | .49   | .49   |
| Cobalt, pow'd, lb.          | .20   | .28   |
| Cosine Murate, per oz.      | 4.75  | 4.95  |

|                          |       |       |
|--------------------------|-------|-------|
| Codeine bulk, oz.        | 4.75  | 4.95  |
| Codeine, eight.          | 4.65  | 4.95  |
| Cod Liver Oil, Nor-      |       |       |
| wegian, bbls.            | 19.50 | 25.00 |
| Colocynth:               |       |       |
| Trieste, lb.             | .87   | .38   |
| Spanish.                 | .80   | .80   |
| Copras, per 100 lb.      | .80   | .80   |
| Cr. Tartar, Crystals, lb | .18   | .18   |
| Powdered, lb.            | .18   | .18   |
| Cubeb Berries, T.K., lb. | .21   | .21   |
| Ordinary, lb.            | .17   | .18   |
| Cutch, bales, SM, lb.    | .04   | .04   |
| Cutch, boxes lb.         | .09   | .09   |
| Cuttle bone, Trieste, lb | .10   | .11   |
| Jewelers' lb.            | .35   | .05   |
| Dextrose.                | .04   | .05   |
| Divi Divi, per ton.      | 50.00 | 60.00 |
| Dragon's B'd, lump, lb.  | .10   | .10   |
| In reeds, lb.            | .45   | .50   |
| Epsom Salts, per 100 lb. | 1.10  | 1.20  |
| Ergot:                   |       |       |
| G'm'n and Rusa'n, lb.    | .26   | .30   |
| Spanish, lb.             | .30   | .32   |
| Ergotine, Domestic.      | 4.00  | 4.00  |
| German.                  | 4.00  | 4.00  |
| Flowers:                 |       |       |
| Arnica Flowers, per lb   | .10   | .11   |
| Chamomile.               |       |       |
| German, New, lb.         | .19   | .24   |
| Roman, New.              | .10   | .18   |
| Roman, lb., old.         | .12   | .20   |
| Lavender Flowers         |       |       |
| Ordinary, per lb.        | .04   | .08   |
| Select, per lb.          | .15   | .65   |
| Gambier, lb.             | .03   | .04   |
| Glycerin, bbls, lb       | .13   | .13   |
| cases, lb.               | .14   | .16   |
| Grains, Paradise, lb.    | .06   | .07   |
| Guarana, lb.             | 1.00  | 1.00  |
| Gums:                    |       |       |
| Aloes, Barb, lb.         | .06   | .12   |
| " Cape, lb.              | .05   | .06   |
| " Curacao, lb.           | .08   | .03   |
| " Socotrine, lb.         | .30   | .40   |
| Arabic 1st picked.       | .47   | .55   |
| " " " "                  | .34   | .36   |
| Arabic, sorts.           | .11   | .12   |
| Asafetida, lb.           | .09   | .25   |
| Benzoin, lb.             | .35   | .40   |
| Chicle, lb.              | .24   | .25   |
| Gamboge, lb.             | .52   | .54   |
| Guaiac, lb.              | .16   | .22   |
| Kino, lb.                | .75   | 1.00  |
| Mastic, lb.              | .62   | .70   |
| Myrrh, lb.               | .80   | .38   |
| Olibanum, sorts, lb.     | .05   | .06   |
| " tears, lb.             | .11   | .13   |
| Sandrac, lb.             | .20   | .30   |
| Senegal, picked, lb.     | .14   | .60   |
| sorts, lb.               | .03   | .10   |
| Shellac, DC, lb.         | .34   | .35   |
| " VSO, lb.               | .31   | .32   |
| " Diam'd I, lb           | .27   | .27   |
| " SS, lb.                | .27   | .27   |
| " TN, lb.                | .27   | .27   |
| " Garnet.                | .24   | .25   |
| " Bleached, lb           | .30   | .31   |
| Tragacanth, Aleppo, lb.  | .30   | .56   |
| Harlem Oil.              | .20   | .50   |
| Indigo, lb.              | .45   | 1.05  |
| Insect Flowers.          | .19   | .20   |
| Insect Powder, pure, lb. | .16   | .20   |
| Iodide Potash, bulk, lb. | 2.75  | 2.80  |
| bot's, lb.               | 2.83  | 2.88  |
| Isinglass, Am'r'n, lb.   | .47   | .60   |
| Japan, lb.               | .35   | .35   |
| Juniper Berries, lb.     | .02   | .03   |
| Leaves:                  |       |       |
| Belladonna, per lb.      | .09   | .11   |
| Buchu, short, lb.        | .12   | .14   |
| " long, lb.              | .25   | .25   |
| Coca, prime, lb.         | .14   | .32   |
| Damia, lb.               | .13   | .16   |
| Hyoscyamus.              | .07   | .08   |
| Jaborandi, lb.           | .45   | .50   |
| Senna Alex natr'l, lb.   | .18   | .25   |
| Senna Alex garbled lb.   | .22   | .27   |
| Senna Tinney, lb.        | .06   | .18   |
| Stramonium.              | .05   | .08   |
| Licorice, P. & S., lb.   | .24   | .24   |
| Lupulin, German.         | .45   | 1.75  |
| Lycopodium, lb.          | .58   | .59   |
| Manna, large flake, lb.  | .85   | .90   |
| Small flake, lb.         | .35   | .37   |
| Menthol, Japanese.       | .00   | 4.50  |
| Mercurials:              |       |       |
| Blue Pill, lb.           | .32   | .34   |
| Calomel, lb.             | .72   | .72   |
| Cor. Sublimite, lb.      | .61   | .61   |
| Mercury and Chalk.       | .30   | .30   |
| Ointment, lb.            | .28   | .39   |
| Red Precipitate, lb.     | .81   | .81   |
| White.                   | .86   | .86   |
| Morphine, bulk, oz.      | 1.90  | 2.05  |
| Eights, oz.              | 2.25  | 2.30  |
| Moss, Irish, lb.         | .03   | .06   |
| Irish, bleached, lb.     | .13   | .15   |
| Muriate Potash, per 100  |       |       |
| lbs.                     | 1.78  | 1.85  |
| Naphthaline, flake, per  |       |       |
| lb.                      | .03   | .04   |
| Naphthaline, Ball, per   |       |       |
| lb.                      | .00   | .04   |

|                            |      |      |
|----------------------------|------|------|
| Nitrate Silver, oz.        | .47  | .48  |
| Nitrate Soda, 100 lb.      | 1.82 | 1.85 |
| Nux Vomica, lb.            | .03  | .04  |
| Nutgalls, China, per lb.   | .13  | .13  |
| Alpen, per lb.             | .14  | .14  |
| Oils, Essential:           |      |      |
| Anise.                     | 1.40 | 1.45 |
| Almonds, Bitter.           | .80  | 7.50 |
| " Sweet.                   | .80  | .43  |
| Bay, per lb.               | 3.50 | 4.00 |
| Bergamot.                  | 1.75 | 2.65 |
| Calceut, Native.           | .35  | .45  |
| Camphor.                   | .07  | .08  |
| Cassa.                     | .80  | .85  |
| Citronella, Native.        | .24  | .28  |
| Clove.                     | .55  | .55  |
| Copaiba.                   | .65  | .70  |
| Croton.                    | .75  | .80  |
| Cubeb.                     | 1.90 | 2.00 |
| Erigeron, per lb.          | 1.45 | 1.50 |
| Geranium Chris.            | 4.50 | 7.50 |
| Lavender.                  | 1.20 | 1.25 |
| " Garden.                  | .40  | .50  |
| Lemon, as to brand.        | 1.15 | 1.80 |
| Lemongrass.                | .70  | .70  |
| Musk, per lb.              | 7.00 | 8.00 |
| Myrbane.                   | .17  | .19  |
| Neroli.                    | .25  | .28  |
| Nutmeg.                    | 1.75 | 2.75 |
| Orange.                    | 1.40 | 1.65 |
| Origanum.                  | .24  | .24  |
| Pennyroyal.                | 1.00 | 1.10 |
| Peppermint, bulk.          | 2.35 | 2.50 |
| " HGH.                     | .30  | .30  |
| Rose.                      | 7.50 | 8.00 |
| Sandalwood.                | .85  | .85  |
| Sassafras.                 | .34  | .37  |
| Sassafras, Artificial.     | .25  | .25  |
| Spearmint.                 | 1.60 | 1.80 |
| Tansy.                     | 8.00 | 3.00 |
| Wintergreen.               | 1.55 | 1.60 |
| " Artificial.              | .90  | .90  |
| Wormwood.                  | 2.15 | 2.25 |
| Opium, Natur'l, ca, per    |      |      |
| lb.                        | 2.15 | 2.25 |
| Opium, Ordinary.           |      |      |
| Jobbing, per lb.           | 2.15 | 2.20 |
| Opium, Powd., per lb.      | 3.00 | 3.10 |
| Phenacetine, per oz.       | .85  | 1.00 |
| Prussiate Potash, Yel-     |      |      |
| low, per lb.               | .22  | .23  |
| Red, per lb.               | .39  | .42  |
| Quicksilver, flasks, per   |      |      |
| lb.                        | .51  | .52  |
| Quinine:                   |      |      |
| Domestic, bulk, oz.        | .22  | .22  |
| Domestic, oz.              | .28  | .29  |
| German, bulk.              | .10  | .10  |
| German, oz.                | .27  | .29  |
| Roots, Aconite, lb.        | .09  | .14  |
| Althea, cut, lb.           | .16  | .18  |
| Alkanet, lb.               | .06  | .07  |
| Arnica, lb.                | .12  | .13  |
| Belladonna Ger., lb.       | .08  | .12  |
| Blood, lb.                 | .05  | .06  |
| Calamus, lb.               | .07  | .08  |
| Calamus, bleac'd, lb.      | .21  | .24  |
| Colchicum, per lb.         | .11  | .14  |
| Colombo, lb.               | .06  | .12  |
| Dandelion, Germ. lb.       | .07  | .10  |
| Dogwood, lb.               | .08  | .10  |
| Galangal, lb.              | .04  | .04  |
| Gentian, lb.               | .03  | .04  |
| Ginseng, lb.               | 2.50 | 3.25 |
| Ginger, Jamaica,           |      |      |
| bld'd, lb.                 | .16  | .17  |
| Ginger, Jamaica,           |      |      |
| unbld'd, lb.               | .14  | .16  |
| Golden Seal, lb.           | .08  | .08  |
| Hellebore, powd, lb.       | .07  | .08  |
| Ipecac, lb.                | 1.20 | 1.30 |
| Jalap, lb.                 | .28  | .30  |
| Kava Kava, lb.             | .17  | .20  |
| Licorice, select, lb.      | .08  | .15  |
| " P'd, lb.                 | .05  | .12  |
| Lovage, lb.                | .50  | .55  |
| Mandrake, lb.              | .03  | .04  |
| Orris, Florentine, lb.     | .20  | .25  |
| Orris, Verona.             | .10  | .14  |
| Pink, lb.                  | .24  | .30  |
| Rhubarb, whole, lb.        | .25  | .60  |
| Sarsaparilla, Hond, lb.    | .28  | .42  |
| Sarsaparilla, Mex, lb.     | .09  | .10  |
| Senega, lb.                | .45  | .47  |
| Serpentaria, lb.           | .30  | .35  |
| Valerian, Belgian, lb.     | .07  | .07  |
| " German, lb.              | .10  | .12  |
| Saffron, Amn., lb.         | .38  | .38  |
| Spanish, Valencia, lb.     | 6.25 | 6.50 |
| Spanish, Alicante, lb.     | .20  | 4.50 |
| Sal Ammoniac, lump, lb.    | .06  | .06  |
| Do., Granulated, lb.       | .05  | .09  |
| Sal Soda, Eng., 100 lb.    | 1.00 | 1.05 |
| " American.                | .90  | .95  |
| Salt peter, crude, per lb. | .03  | .04  |
| Salt peter, Refined, per   |      |      |
| lb.                        | .06  | .08  |
| Seeds, Anise, Ital, lb.    | .10  | .11  |
| Anise, German, lb.         | .06  | .06  |
| Anise, Star, lb.           | .22  | .23  |
| Canary, Smyrna, lb.        | .02  | .02  |
| Canary, Sicily, lb.        | .03  | .04  |
| Caraway, lb.               | .06  | .06  |
| Celery, lb.                | .17  | .18  |

|                          |       |       |
|--------------------------|-------|-------|
| Cardamon, Aleppy,        |       |       |
| per lb.                  | .65   | .75   |
| Cardamon, Malabar,       |       |       |
| per lb.                  | .75   | .85   |
| Colchicum, lb.           | .12   | .14   |
| Coriander, lb.           | .05   | .05   |
| Cummin, lb.              | .11   | .11   |
| Fennel, Germ., lb.       | .11   | .12   |
| Flax Meal, per lb.       | .08   | .08   |
| Foenugreek, lb.          | .08   | .08   |
| Hemp, Russian, lb.       | .03   | .03   |
| Mustard, yel. Cal. lb.   | .04   | .04   |
| Mustard, brown, Cal.     |       |       |
| lb.                      | .03   | .04   |
| Poppy, per lb.           | .09   | .10   |
| Quince, German, lb.      | .45   | .50   |
| Rape, German, lb.        | .03   | .03   |
| Rape, English, lb.       | .05   | .08   |
| Soap, Castile, Mara,     |       |       |
| mottled, pure, lb.       | .50   | .06   |
| White, lb.               | .06   | .10   |
| Soda Ash, lb., 48% per   |       |       |
| 100 lb.                  | 1.30  | 1.80  |
| Squilla, white, lb.      | .04   | .06   |
| Sugar Milk, powd., lb.   | .10   | .11   |
| Sugar Lead, white, lb.   | .11   | .11   |
| Lead, brown, lb.         | .05   | .06   |
| Sulphate Ammonia, per    |       |       |
| 100 lb.                  | 2.90  | 3.00  |
| Do. Potash, 48% per      |       |       |
| 100 lb.                  | 1.11  | 1.15  |
| Do., Potash, 90% per     |       |       |
| 100 lb.                  | 2.20  | 2.15  |
| Sulphur, Roll.           | .01   | .01   |
| " Flour.                 | .01   | .01   |
| Spirits Nitre, U. S. P.  | .39   | .40   |
| Spirit Ammonia, Arom.    | .44   | .45   |
| Sulphuric Ether.         | .54   | .61   |
| Sumac, Sicily, ton.      | 72.50 | 77.00 |
| " Virginia.              | 43.00 | 47.50 |
| Tar Barbadoes, gal.      | .40   | .45   |
| Tin Crystals, bbls., per |       |       |
| lb.                      | .15   | .15   |
| Jara, per lb.            | .27   | .27   |
| Tonka Beans, Angost.,    |       |       |
| lb.                      | 1.70  | 1.85  |
| Tonka Beans, Para, lb.   | .50   | .60   |
| " Angostura.             | 1.70  | 1.85  |
| Turpentine, Spirits.     | .30   | .34   |
| Vanilla Beans, lb.       | 6.00  | 13.00 |
| " cut, lb.               | 4.75  | 6.00  |
| Venice Turpentine, bar-  |       |       |
| rels, lb.                | .18   | .19   |
| Cans, lb.                | .19   | .20   |
| Wax, Brazil, Veg., lb.   | .08   | .09   |
| Japan, lb.               | .08   | .08   |
| Zinc Oxide.              | .30   | .48   |

## Animal and Vegetable Oils.

|   |       |   |       |
|---|-------|---|-------|
| Linseed, raw, gal.....                                      | ...   | 0 | ..42  |
| Linseed, boiled, gal.....                                   | ...   | 0 | ..46  |
| Lard, City, Prime, present make, gal.....                   | ..78  | 0 | ..74  |
| Lard, City, Extra No. 1, gal.....                           | ...   | 0 | ..53  |
| Lard, City, No. 1, gal.....                                 | ...   | 0 | ..45  |
| " West, prime, gal.....                                     | ...   | 0 | ...   |
| Cotton-seed, C r u d e, off grades, gal.....                | ..24  | 0 | ..87  |
| Cotton-seed, Summer Yellow, prime, gal.....                 | ..34  | 0 | ..35  |
| Cotton-seed, Summer Yellow, off grades.....                 | 30    | 0 | ..33  |
| Cotton-seed, Winter Yellow, gal.....                        | ...   | 0 | ...   |
| Cotton-seed, Prime White, gal.....                          | ..39  | 0 | ..40  |
| Sperm, Crude, gal.....                                      | ..65  | 0 | ..67  |
| Sperm, Natural Spring gal.....                              | ..66  | 0 | ..68  |
| Sperm, Bleached Spring gal.....                             | ..71  | 0 | ..73  |
| Sperm, Natural Winter, gal.....                             | ..71  | 0 | ..73  |
| Sperm, Bleached Winter, gal.....                            | ..76  | 0 | ..78  |
| Whale, Natural Winter, gal.....                             | ..45  | 0 | ...   |
| Whale, Bleached Winter, gal.....                            | ..48  | 0 | ...   |
| Whale, Ex. Bl'ch'd, gal. Mendenhall, Crude, Sound, gal..... | ..49  | 0 | ..50  |
| Dark, pressed, gal.....                                     | ..33  | 0 | ..34  |
| Light, pressed, gal.....                                    | ..35  | 0 | ...   |
| Bleached, Winter, gal.....                                  | ..48  | 0 | ...   |
| Extra Bleached, gal.....                                    | ..43  | 0 | ...   |
| Tallow, City, prime gal.....                                | ..48  | 0 | ..39  |
| Cocoanut, Ceylon, lb.....                                   | ..05½ | 0 | ..05½ |
| Cochin, lb.....   | ...   | 0 | ..06½ |
| Cod, Domestic, gal.....                                     | ..38  | 0 | ..40  |
| Foreign, gal.....   | ..48  | 0 | ..45  |
| Red Elaine, gal.....  | ..44  | 0 | ..48  |
| Red Saponified, lb.....                                     | ..04½ | 0 | ..05½ |
| Bank, gal.....  | ..35  | 0 | ...   |
| Strata, gal.....  | ..36  | 0 | ...   |
| Olive oil for table in tins.....                            | 1.50  | 0 | 1.85  |
| Olive, Com'm'ble, gal.....                                  | ..57  | 0 | ..60  |
| Nutmfoot, prime, gal.....                                   | ..60  | 0 | ..63  |
| Palm, prime, Lagos, lb.....                                 | ..06  | 0 | ..06½ |

# American Druggist and Pharmaceutical Record.

A JOURNAL OF PRACTICAL PHARMACY.

VOL. XXIII. No. 24.

NEW YORK, DECEMBER 14, 1893.

WHOLE No. 277.

## AMERICAN DRUGGIST PUBLISHING COMPANY.

37 COLLEGE PLACE, NEW YORK.

A. R. ELLIOTT, PRESIDENT.

Subscription Price—For the United States and Canada, - \$2.00  
If paid in advance direct to this office, 1.50  
" " for Foreign Countries, - - - 2.50  
Single Copies, - - - - - .15

The "American Druggist and Pharmaceutical Record" is issued on Thursday of each week. Changes of advertisements and all copy for publication should be received before Tuesday of each week.

We are not responsible for any money paid to agents. All remittances should be made direct to this office. Express Orders, Post-Office Orders and Drafts on New York should be made payable to the "American Druggist Publishing Company" and addressed to them at 37 College Place, New York.

*Liberal Committions to Club Agents.*

### The Ideal Trade Journal.

The ideal is to be attained by selecting and assembling in one whole the beauties and perfections which are usually seen in different individuals, excluding everything defective or unseemly, so as to form a type or model of the species.—*Fleming.*

"We find the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD an ideal trade journal. The market reports alone are worth the price of the paper.—A. Comstock & Son, Smyrna, N. Y."

### Awakened to the Value of Advertising.

To the Editor of AMERICAN DRUGGIST:

Your series of tips on advertising has been the means of awakening me on the subject of advertising. I have always known that advertising pays, but how to do it to be of much use to the retail druggist was not plain to me.

But, as stated above, I have been awakened and have seen other possibilities than those shown by your series and am very much gratified at the result.

H. F. RUHL.

Manheim, Pa.

IN a recent issue of the *Medical News* there appears an article by J. S. TRIPLETT, M.D., of Harrisonville, Mo., in which is displayed the physician's usual ignorance of the composition of the galenicals of the Pharmacopœia. It is in a reference to the toxic symptoms produced in some of his patients by certain seidlitz powders that the physician referred to gravely states that the poisoning symptoms were caused "in all probability by a mistake made in compounding the powders, the antimonio-potassic tartrate being used instead of potassium bitartrate." Since when has potassium bitartrate formed a constituent of seidlitz powders? And physicians may forsooth dispense drugs in defiance of the pharmacy! So say the Pennsylvania courts.

THE latest teaching in "newspaper science" is that sodium bicarbonate is at once inflammable and explosive. We arrive at this knowledge by an account in *The Evening Post* of an accident which resulted from the "explosion of a jar of bicarbonate of soda," the latter having "caught fire." As the *Post* prides itself upon its accuracy it will doubtless be ready to furnish proof of this new phenomenon.

IN the *Canadian Pharmaceutical Journal* for November E. B. SHUTTLEWORTH discusses editorially the present condition of pharmacy in Canada and draws a depressing picture of the business situation. Business in the city of Toronto is referred to as at a standstill, the volume having contracted to such limits that difficulty is realized in even paying expenses. The depression is thought to have its origin in the neglect of such branches of trade as paints, paint oils, seeds and fancy goods.

TO Mr. WARREN POWDER, who "has charge of the pharmaceutical department of the Auditorium Drug Store," and to "Manager F. J. SCHROTER of Arends' Fifth Avenue Drug Store," we tender the evidences of our most distinguished consideration. An interview with them, as published in the *Chicago Mail* of November 18, is an object lesson which may prove of much value as an offset to the standing headline "Another Druggist's Mistake."

In these interviews the public are given an insight into the carelessness too frequently indulged in by physicians in writing prescriptions, two particularly atrocious prescriptions being reproduced in facsimile. In small towns such a course on the part of the druggist would probably win him the enmity of the physician, but in the larger cities druggists can help both pharmacists and physicians by aiding the daily press toward getting up articles of this kind. Reporters are always glad to have a good story, and nearly every city druggist can furnish two or three specimens of the art "how not to write prescriptions," which will "make up" well. The advantage to be derived from such publication is threefold. It makes the physicians more careful in their writing, thereby contributing to the public safety; it puts pharmacists at large in a better light with the public, showing the care and responsibility which they must shoulder, and it also serves to advertise the particular pharmacist furnishing the information.

## PHARMACEUTICAL NOTES.

**Antiphthisin** has been patented by Prof. E. Klebs, The nature of the substance is not given (*Pharm. Centralhalle*).

**Asaba oil** is a yellow oil (*Annals di chim. e farmacol.*) of 0.922 specific gravity congealing at  $-3^{\circ}\text{C.}$ , which is obtained from the seed of one of the cucurbitaceæ. It is a drying oil.

**Symphorol** is the name proposed for the salts of caffeinic sulphonic acid, the lithium salt being designated as "symphorol L" and the strontium salt as "symphorol S."

**Iodine trichloride** by subcutaneous injection has been recommended by Dr. S. Gottschalk, of Berlin (*Deutsche Med. Woch.*), for puerperal fever. He uses 1 to 2 Cc. of a one per cent. solution and observed no untoward effects, either local or systemic.

**Abrastol** is a sulphonic derivative of beta-naphthol, which is recommended as a food preservative. Dujardin Beaumetz and Stäckler say (*Pharm. Post*) that it can be taken in doses of 10 grammes per day with impunity. It is excreted through the kidneys and has characteristic anti arthritic properties.

**Hydrogen Peroxide as a Disinfectant.**—It is pointed out by Traugott that hydrogen peroxide may be substituted for corrosive sublimate or carbolic acid as a disinfecting agent, when sufficient time (fifteen to thirty minutes) can be allowed for it to act properly. It is not suitable for the purpose, however, if it be desired to effect disinfection rapidly (*Zeit. f. Hygiene*, xiv., 427).

**Detection of Dextrine in Gums.**—To detect dextrine in gums, Professor Pietro Palladino heats the sample to ebullition for a minute with aniline sulphate, chloro-brucine, pure brucine orceine, or orceine. With these reagents, pure gum in a potassic solution gives a pale straw color, which becomes a little greenish, while gums containing dextrine take a yellowish orange or a brownish red color.

**Brewer's Yeast.**—J. Effront, in a paper recently communicated to the French Academy of Sciences, mentions certain chemical conditions of the activity of brewer's yeast. It was found by a series of experiments that various kinds of yeast, after treatment with gradually increasing quantities of ammonium fluoride, acquired a very considerable fermenting power, estimated at about ten times that developed before this treatment. It also imparted properties which some physiologists had up to now considered as the privilege of certain species.

**Hypaphorine** is the alkaloid of *Hypaphorus subumbraiss*, Hskl, a papilionaceous tree of Java which exists in two varieties, *inernus* and *aculeatus*. According to Plugge (*Arch. f. expt. Pathol.*) the alkaloid occurs only in the first variety, principally in the seed, and to a smaller extent in the bark. Hypaphorine forms colorless crystals easily soluble in water, neutral in reaction. It can be extracted from ether acid or a kaline media by means of ether, benzole, petroleum ether, or chloroform. When heated above  $220^{\circ}\text{C.}$  it is decomposed without melting. It is a poison to frogs.

**Detection of Gurjun Balsam in Copaiba.**—Hirschsohn states that 10 per cent. of adulteration can be definitely recognized by the following method:

I.—Add 2 to 4 drops of the balsam to 1 to 2 Cc. of a solution consisting of 1.0 gramme pure concentrated sulphuric acid and 25 grammes of absolute acetic ether. No red or violet coloration should ensue.

II.—Shake one volume of the balsam well with from 3 to 4 volumes of water, filter through a wetted filter,

and to the filtrate add an equal volume of hydrochloric acid of 1.12 specific gravity. No pink color should appear within 15 minutes. (*Pharm. Zeit. für Russland*, No. 43).

## Notes, Queries, and Answers.

*We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.*

*When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.*

**Creme Simon.** G. K., New York.—This is stated to be composed of zinc white and powdered talc suspended in a mixture of glycerin and water and perfumed with oil of patchouly.

**French Mustard.** J. A. A., Pa.—Here is an improved recipe for this condiment: Take salt,  $1\frac{3}{4}$  lbs.; scraped horse radish, 1 lb.; garlic 2 cloves, boiling vinegar 2 gallons. Macerate in a covered vessel for twenty-four hours, strain, and add sufficient flour of mustard.

**Frostila.**—E. & S. Bangor, Pa. A preparation similar to this may be made as follows:

|                      |             |
|----------------------|-------------|
| Quince seed.....     | 240 grains  |
| Borax, powdered..... | 60 grains   |
| Glycerin.....        | 3 fl. ozs.  |
| Cologne.....         | 2 fl. ozs.  |
| Hot water.....       | 12 fl. ozs. |

Crush the quince seed and macerate with the hot water for one hour, stirring frequently, then strain through muslin without pressure, add the glycerin and borax, and finally add the cologne.

This is but one of many modifications of the glycerin jelly, in some of which, such as Helmbold's jelly of glycerin and roses, Irish moss is, we believe, used as the source of the mucilaginous matter of the jelly. In most of the formulas published, however, tragacanth is the mucilaginous body, and we append a few formulas of this nature below, the subject being a seasonable one:

|                         |                         |
|-------------------------|-------------------------|
| Boric acid.....         | 40 grains               |
| Tragacanth.....         | 25 grains               |
| Glycerin.....           | 1 fl. oz.               |
| Alcohol.....            | $\frac{1}{2}$ fl. oz.   |
| Spirit of lavender..... | 1 fl. dr.               |
| Spirit of bergamot..... | 1 fl. dr.               |
| Water.....              | $6\frac{1}{4}$ fl. ozs. |

Care must be taken to obtain a smooth mucilage perfectly free from lumps, and for this reason it is advisable to strain through a muslin cloth.

## MARSHMALLOW CREAM.

|                            |             |
|----------------------------|-------------|
| Tragacanth, powdered.....  | 1 oz.       |
| Marshmallow root, cut..... | 1 oz.       |
| Water.....                 | 24 fl. ozs. |
| Glycerin.....              | 3 fl. ozs.  |
| Cologne.....               | 2 fl. ozs.  |

Mix the glycerin, water, tragacanth and marshmallow, and macerate with frequent agitation for two days. Then strain through muslin, add the cologne, and after standing a few days strain again.

## SAVONIA CREAM.

|                         |                   |
|-------------------------|-------------------|
| White castile soap..... | 1 oz.             |
| Tragacanth.....         | $\frac{1}{4}$ oz. |
| Water.....              | 8 fl. ozs.        |
| Glycerin.....           | 6 fl. ozs.        |
| Cologne.....            | 2 fl. ozs.        |

The following belongs to a somewhat different class, being a liquid:

## BLANDINE.

|                              |             |
|------------------------------|-------------|
| Albumen (white of eggs)..... | 6 ozs.      |
| Glycerin.....                | 10 fl. ozs. |
| Oil of bitter almonds.....   | 10 drops    |

Mix and strain several times.

## News and Notes.

### Random Notes of a Rambling Journey.—I.

WASHINGTON, D. C.

For comfort in traveling commend me to the train service of the Pennsylvania Railroad! The "Congressional limited" on which I made the trip from New York to Washington, approaches the luxurious in respect of elegance of appointment and decoration, and affords a degree of comfort in traveling surpassed by no other system of cars. In the parlor cars, red, green and gold are the prevailing colors, the effect in general being suggestive of the style of interior decoration fashionable during the period of the French Empire. The scenery to right and left of the line of road presents no features that might be termed picturesque, though charmingly diversified in certain parts of the Schuylkill region.

The Potomac depot of the Pennsylvania Railroad does not at first sight impress the visitor favorably; both the interior and outside approaches appearing singularly out of keeping with the handsome public buildings which form the general architectural adornments of Washington, a city which ranks first among the beautiful cities of the country.

To the New Yorker, accustomed to the staid four wheeler and smart hansom cab, the "herdic," as our Jehu styled his curious looking box arrangement on two wheels, appears singularly grotesque. Apart, however, from its odd appearance and a slight fear brought about by its tendency to tilt over to one side when turning on the car tracks, it is a fairly comfortable conveyance.

The drug trade of Washington has felt the full effects of the recent stringency in money and is in fact making a slower recovery from the conditions incident thereto than other cities of greater commercial importance.

I had a short chat with the proprietor of the Ebbitt House Pharmacy on general drug topics during my stay in the city, and he told the story which is now familiar enough in all parts of the country: great decrease in business and extreme difficulty in collecting accounts. Transient business has fallen off in a marked manner and as present indications point to a likelihood of fewer visitors in Washington this season than for a number of years past, the outlook is not very promising. The location of the Ebbitt House Pharmacy is one well calculated for purposes of display, though little effort in this direction appears to be made, the proprietor apparently contenting himself with advertising the attractions of his soda counter and leaving his general business and particularly the prescription dispensing part thereof to take care of itself. The chief attractions—at his soda fountain, which is fairly ornamental, are Armour's "White Jug Bouillon" and Burnham's "Clam Bouillon." The store was owned formerly by R. K. Helphenstine, who has since become somewhat widely known through his connection with the Terraline Company of which he is president. The present owner of the store, S. F. Ware, is a Ph.G. and M.D., being a graduate of both the Jefferson Medical College and the Philadelphia College of Pharmacy. He

might be termed a pharmacist of the old school, but my impression is that he does not care to be known as connected with any school. He cannot be styled progressive as he reads no pharmaceutical literature except the circulars and house organs which he says are delivered at his store free of cost, and he depends on what traveling salesmen may tell him for knowledge of the recent developments in either chemistry or pharmacy.

The store of Wm. S. Thompson, on Fifteenth street, is an establishment which is creditable alike to the city and its proprietor. The interior arrangements of this truly modern pharmacy are eminently well adapted to the character of the business transacted, prescription dispensing being a feature of evident cultivation. The general arrangement of the store is excellent and the style of fittings and decoration ornate and tasteful. Mr. Thompson was absent from the city at the time of my visit, but his manager, F. C. Henry, very courteously offered to show me over the establishment. Mr. Henry is a graduate of the National College of Pharmacy, Washington, and a gentleman of pleasant manners who is well abreast of recent advancements in pharmacy. The prescription department of Thompson's Pharmacy occupies about one-fourth of the premises to the rear, and gives occupation to four clerks, who are kept constantly busy either in the actual compounding of physicians' prescriptions or in replenishing depleted stock by the manufacture of tinctures and other galenicals. Especially worthy of mention here is the simple system of indexing which has for some time been in use by Mr. Thompson in connection with the storage of miscellaneous articles. This consists of an arrangement of drawers numbered consecutively from 100 up, the numbers referring to books containing the names of an extensive list of miscellaneous chemicals, pills, tablet triturates and fluid and solid extracts. By means of this arrangement search for a given article entails no uncertainty, the particular thing sought for being readily located by reference to the index. Thus, if strychnine pills  $\frac{1}{2}$  grain should be required, the only thing necessary to locate their whereabouts would be to turn to Strychnine in the Pill book and referring to its number turn to the drawer corresponding where the pills would be found with others of different strengths. The Thompson Pharmacy is long and high and advantage has been taken of this to construct a gallery extending the entire length of the store. The wall space above this gallery is used for the storage of surplus stock and bulky sundries, such as crutches, trusses, etc. The storage and display of sponges, which is so vexing a problem to many druggists, has not yet been solved in the pharmacy under consideration, but Mr. Thompson has planned, and will probably put in soon a series of specially designed glass cases of narrow dimensions to occupy the center of the floor space and extend three-quarters the length of the store. T. A. Howard, who has been in the employment of Mr. Thompson for over 20 years, is head prescription clerk, and, as may be inferred, is thoroughly well versed in the manipulations of the expert apothecary. Two young ladies of prepossessing appearance are employed by Mr. Thompson in the capacity of clerks. The duties of one of

these ladies consists of waiting on customers for soda water, which is a novelty that New York druggists have yet to introduce.

The term "cutter," as applied to druggists who retail goods at or below their original cost, appears to be changing its meaning, and is now likely to become as much synonymous of business push and enterprise as aught else. This is fairly well illustrated in the case of Edward P. Mertz, one of the most aggressive and progressive of Washington pharmacists. He is reputed to be the keenest cutter of them all, but his reputation in this respect, as I ascertained upon investigation and inquiry, is like a good many other reputations—not fairly earned. The truth of the matter is, he is alive to the value of advertising and makes good use of printer's ink and other forcible means of attracting the attention of the "dear public" to his place of business. He was celebrating his eighth annual opening when I called upon him and evidences of this were all too many in the floral decorations of the store. Seen from the outside his place resembled a well stocked florist's establishment, the display of cut flowers, palms and other plants being lavish and effective. He employs a large staff of employees, eight of whom are ladies, and two of these boast of a regular pharmaceutical training. E. L. Willhite, who has the management of the store, is a graduate of the class of '84, Michigan School of Pharmacy.

THOS. J. KEENAN.

### Gotham Gossip.

A druggist remarked to me the other day that a course of study on the art of applying for a situation would be a serviceable addition to the curricula of the pharmaceutical colleges. "Drug clerks as a class," he said, "exhibit a woful lack of business training in the mere matter of making application; they are never prompt about replying to advertisements for one thing, and when application is made by letter it is usually too indefinite for consideration." He told a good story to illustrate the necessity of making *early* application for a vacancy. "Somewhere in the 'sos," he said, "a citizen of one of the towns in central New York, through which the Erie Canal passes was an anxious applicant for a berth in a government office in the town. The Washington authorities having referred the matter to the head of the local office, the life of the latter was made a burden to him by the frequent calls of the 'friend of the party.' To all his demands an unvarying 'no vacancy for anyone' was returned. At last, as the oft-disappointed one was on his way to try once more, he saw a crowd on the canal bank, and going there found the body of a drowned man just being taken from the water. He recognized it as that of one of the employees in the office which he had so often visited. 'Now is my time,' he thought. 'Here is a vacancy now!'—and off he went. To his amazement he was met with the stereotyped 'no vacancy!' 'Why, hang it, there *is* one!—I've just seen poor J. pulled out of the canal, dead! Give me his place. 'My dear sir,' blandly replied the man of authority, 'there is no vacancy. I assure you I've just filled Mr. J.'s place by appointing a man who saw him fall into the canal.'"

M. Monteser has opened an attractively fitted up pharmacy at 172 Avenue A.

Henry W. Williams, who lately retired from the firm of H. W. Williams & Co., has taken a temporary office at 28 College place.

The premises of Ashton M. Boney, ex-changer of patent medicines and drug broker, at 28 Gold street, New York, were partially destroyed by fire on November 29. The loss which amounted to \$4,000 is covered by insurance.

Ernest Stoffregen, the energetic general business manager for Sharp & Dohme, was inadvertently referred to in a recent issue as Lewis instead of Ernest Stoffregen. As much as Mr. Stoffregen regretted the breaking up of his old social ties, which was involved by removing to New York City, he now finds that residence here has its compensations.

Among the polished and intelligent foreigners who do so much toward giving New York city its cosmopolitan tone the Parisian plays a very important role. Your Franco-American is apt to be both useful and ornamental and to make himself felt in his own sphere of action. An interesting exposition of this doctrine is shown in the career of Emil Utard, who has contributed so much toward the vogue enjoyed by Pinaud's perfumery. Mr. Utard has all the originality of an American, the tenacity of a Briton, and the polish and taste of a Parisian, and these qualities are potent factors in his eminent success in this city. "Pinaud" has come latterly to be almost a household word among the people of fashion.

Here is the way a New York city druggist describes his method of bookkeeping: "Here in this drawer, you see, are a number of slips of paper. Each one of them contains the account of one of my customers, and some of them, you perceive, are very large. I keep no other records. When a man comes in to pay his bill I have everything here on the slip bearing his name, and it takes only a moment to foot it up. When he hands me the money I hand him the slip, and there is an end of the whole matter. Nothing could be simpler, could it? Certainly, nothing could be, from my point of view, and of course no customer can have anything to complain of. The system is capable of indefinite extension. If the number of my patrons who keep accounts should largely increase, I should have to keep the slips in alphabetical order, or something of that kind. Really, this is bookkeeping—if it can be called so—reduced to its lowest terms."

#### New York State Notes.

The Van Deusen Drug Co., of Kings-ton, have been sold out.

E. L. Hawkins has purchased the store of Richard B. Cassebeer at Mount Vernon.

Chas. Krausche has just opened a new pharmacy at Hancock and Evergreen avenues, Brooklyn.

Wm. C. Wagner has opened a handsome pharmacy at the intersection of Bedford and Atlantic avenues, Brooklyn.

Max J. Weishaar, the North Clinton street druggist, Buffalo, who was charged with violating the internal revenue laws, was acquitted by United States Commissioner Gilbert.

Alzheimer & Co. have opened a neat and attractive store under the Bijou Theatre at Livingston and Smith streets, Brooklyn.

The Daily drug store will be opened in a few days at Adams, under the management of H. E. Fox, an expert druggist of long experience. The appointments are first-class throughout.

Louis Spaeth, the Brooklyn druggist who was arrested recently on a charge of man slaughter in having caused the death of a three-year-old child by dispensing an overdose of potassium chlorate, has been admitted to bail. His case will come up for trial in the Gates avenue police court on December 1. Mr. Spaeth's pharmacy at 1153 Broadway was formerly owned by Edward C. Reiss.

The Wilcox-Harvey Natural Carbonic Acid Gas Company has just been incorporated with the Secretary of State, to carry on its operations in Saratoga Springs. The company proposes to collect, bottle and sell a natural carbonic acid gas from a well in the ground. The capital stock is \$150,000, divided into fifteen hundred shares of \$100 each, and the directors for the first year are the following: Henry Wilcox, George F. Harvey and James Mingay, of Saratoga Springs.

#### Druggists Stir up a Strife.

The rivalry that has existed between two drug stores in May's Landing, N. J., has developed into a feud so bitter that the population has been divided into factions, and when preliminary hearing relating to the matter came up in court business was entirely suspended to enable the merchants to witness the proceedings.

Ex-Postmaster Clinton H. Read has conducted a pharmacy at May's Landing for years, but during the Summer a new pharmacy was established and placed in charge of F. J. Voss, a graduate of the Philadelphia College of Pharmacy.

This was the beginning of the trouble. No one knew who owned the new pharmacy, but it did a rushing business. Voss then went to Philadelphia to attend lectures and engaged Charles W. Lake, one of Mr. Read's former clerks, to run the new pharmacy. Mr. Read made the rivalry into a feud by causing Lake's arrest on a charge of larceny.

The feud gradually grew in bitterness until it culminated recently in the arrest of A. A. Ayres, one of the leading citizens, upon the charge of conducting a drug store without having a registered pharmacist in charge.

Before Justice Bodine, not long since, the whole town assembled to hear the proceedings. Witnesses refused to answer questions and Justice Bodine had no power to punish them for contempt. The upshot of the matter was that the justice discharged Mr. Ayres because it could not be proven he had an interest in the store. Meanwhile both pharmacies are struggling for the supremacy.

#### Boston Budget.

The failure of Harry G. Travis, 275 Hanover street, is announced.

The Boston Drug Co.'s office was recently damaged by water which was being used to extinguish a fire at 51 Commercial street.

The T. Metcalf Co. have placed one of Puffer's hot soda fountains in their Copley square store.

The Potter Drug & Chemical Co. have secured an injunction against the parties who placed a "Curative Skin Soap" upon the market.

An elaborate hot soda fountain is being manufactured by James W. Tufts & Co. to fill the special order of Frank O. Guild, of the Back Bay.

Frank E. Ford, M. C. P., '89, is now a full fledged M.D., and has an office on Chambers street. He has just become a member of the M. C. P.

The boys who broke into Mr. Perry's store, 625 Shawmut avenue, have been arrested and have confessed the theft of candy, cigars and cigarets.

Dorchester, so it is said, is to have a new drug store. It will be located at the corner of Washington and School streets and the proprietor will be E. I. Sawyer.

The Charles Richardson who argued for the appointment of an additional cabinet officer to be called the secretary of trade and commerce, before the convention of The National Paint, Oil and Varnish Association, is a member of the firm of Charles Richardson & Co., 89 Oliver street.

Another session of the Board of Registration in Pharmacy was closed on Dec. 8. In all, 43 candidates were examined, and certificates were issued to the following successful applicants: Edward B. Moulton, Jr., of Cochituate; Carlton W. Crocker, of East Boston; Austin C. Dinsmore, of Fitchburg; Harry D. Wheeler, of South Boston; William H. Boodro, of South Boston; Rollin A. Monroe, of Malden; James H. Hayes, of East Boston, and Frank W. Dickinson, of Boston. The next examination—lasting three days—will begin on the 19th of the present month.

At H. E. Woodward's store, 100 Tremont street, numerous small articles have recently been stolen. Suspicion at last rested upon an elderly man of respectable appearance who was wont to visit this store, examine various articles displayed upon the counters and pass out without purchasing, but goods were always missed after his departure. On his last call he was closely watched by the clerks, and when he thought he was unobserved he took a bottle of perfumery. He was afterwards arrested, but refused to give his name on the ground that he was well connected, and that his arrest would cause his family great anguish.

The attempted suicide of George W. Belch, who had been a clerk for I. W. Slack, Center street, was rendered unsuccessful by the latter's presence of mind. On the day in question Belch called at Mr. Slack's store and taking a bottle from the poison closet, measured a portion of its contents into a glass and drank it. Mr. Slack, who had watched Belch, immediately prepared an antidote which he compelled the clerk to drink. This act of mercy caused Belch to rave as though insane, and Mr. Slack, who was convinced that the clerk would again try to kill himself, notified the police. Belch was then taken into custody, and he is now an inmate of Charles street jail, where he will remain pending an examination as to his sanity.

Harry B. Stull, who achieved notoriety in New York by his attempt to secure a divorce from a "1492" actress, has emigrated to North Dakota, and it is said to be his intention to remain in that State until such time as he can legally apply for a loosening of the matrimonial chains.

#### Massachusetts Mention.

C. Dusenbury has opened a new drug store at Windsor.

It is rumored that a new drug store will be opened in Shelburne Falls.

J. A. Slattery, a former clerk for Morse, of Milford, is the proprietor of a new store in Pawtucket, R. I.

The pharmacy of F. W. Richtmeyer, at Cooperstown, has been purchased by S. W. Ferguson of Worcester.

A "Wachusett" soda fountain, from the warerooms of J. W. Tufts & Co., adorns the store of H. C. Esson & Co., Shelburne Falls.

W. P. Beckford, of Reading, has sold out to J. C. Oxley. Among the additions which the latter has made is a Low art tile soda fountain.

F. M. Spiller's store on North avenue, North Abington, was burglarized recently. A quantity of fancy articles and \$5 was the reward of the thieves.

James Denehy has purchased Morse's store at Natick. Mr. Denehy has had the good fortune to secure as manager Robert J. McFettridge, who has acted in the same capacity for Joseph O'Hern, of Waltham.

#### Pennsylvania Pointers.

Chas Adams of Newport has been fined \$10 for dispensing without a license.

John L. Ney, the only pharmacist of Sharlesville, is reported ill with the small-pox.

C. R. Rhodes has moved his place of business into the new block on Market street, Bedford.

J. H. Eggers of the Monongahela House, Pittsburgh, recently detected his colored porter in stealing.

W. A. Davis' store at Frackville was entered by burglars and a small amount of change secured.

Evans' store at Malvern has been discontinued and the former manager, L. H. Lewis, is clerking in Chester.

Samuel S. Jones & Co.'s store, the largest drug house in Wilkesbarre, was closed up by the sheriff, so it is reported.

J. E. Dalton's new house and drug store at Glenolden are nearly completed, and have received their last coat of paint.

Henry W. Gough, for the past ten years clerk and bookkeeper for D. W. Gross & Son, Harrisburg, has embarked in the real estate and Western Loan business.

H. P. Shepley, a Blairsville druggist, was arrested recently for violation of the State pharmacy law in allowing his son and a young man named Charles Coleman to fill prescriptions.

Jas. Kerr, Jr., one of the oldest pharmacists in Western Pennsylvania, has failed, and the sheriff is in charge of the store at Sixth avenue and Smithfield street, Pittsburgh. The failure was precipitated by a suit for \$2,000 entered by the estate of Mary J. McKee.

The Kickapoo Indian Medicine Co., in

their canvass of Pennsylvania, found Brockwayville an unprofitable place to stop. The local paper says that one of the reasons of their failure is "the establishment of good drug stores in the community. A competent druggist can prescribe for any trifling ailment as well as a physician. His knowledge of drugs makes him familiar with their effects, and his judgment can always be relied upon for simple maladies too slight to demand the attention of a physician. A person now goes into a drug store and states his ailment, but instead of calling for any of the multitude of patent nostrums he says to the druggists 'Fix me up something yourself.' The latter compounds a prescription from his proprietary drugs according to the symptoms, which answers the individual case better than the cure-alls. Whenever people learn that they can avail themselves of the skill and knowledge of experienced physicians and druggists at a less cost than to resort to any of the numerous patent medicines, the sale of the latter immediately languishes."

#### Philadelphia Pharmacists.

Dr. Hermany, 39th and Wallace streets, has sold his store to Pierce Gabell.

E. Jungmann has added another store to his list, having purchased Bowers' old stand, 6th and Green streets.

The movement started by the druggists of the northeastern section of the city closing Sunday afternoons has proved a success.

Russell T. Blackwoods has remodeled his store, 15th and Thompson streets, which now presents as fine an appearance as any uptown.

Harry Swain sold his old store, 2d and Siegel streets, to Dr. McFarland, but will be found at his new store, 2d street and Snyder avenue, which is one of the finest downtown.

After several months of dullness the retailers expect a harvest, as the grip has made its appearance again, though not in a malignant form, but judging from the quantity of quinine and phenacatine being used it must be very prevalent.

#### Notes from Detroit.

Among the corporations recently formed in Michigan is the Toledo Drug Co., at Monroe, Mich. Capital stock, \$150,000.

William M. Warren, business manager of Parke, Davis & Co., was recently married to Miss Mary C. Buhl of Detroit. The wedding was one of the social events of the season, and largely attended.

Fire last week was discovered in the building at 1067 Twelfth street, Detroit, Mich., occupied by Charles Moorland, druggist. The stock was damaged to the extent of \$500. Covered by insurance.

J. B. Ford, the extensive glass manufacturer of Pittsburgh, says his soda ash works at Wyandotte, Mich., will start up shortly with 100 hands. These will be gradually increased to the full capacity of the plant, 350 men.

Dr. C. P. Parkill, senior member of the firm of Parkill & Son, druggists and chemists, at Owosso, Mich., died last week after a brief illness. The son will continue the business. Mr. Parkill had been a resident of that place since 1840.

J. J. Haarer, druggist of Detroit, Mich. recently heard his landlady groaning in a room on the second floor of the house. On investigating he found she had been overcome by coal gas. Mr. Haarer was also overcome and the services of a physician were required to bring the two from their lethargy.

The wholesale dry goods establishment of Edson, Moore & Co., Detroit, burned November 23. Williams, Davis, Brooks & Co., wholesale druggists, had \$20,000 worth of goods stored in an adjacent building, which were somewhat damaged by smoke and water. The firm removed nearly all the stock.

Fred McKee, who is prescription clerk with A. A. Schott & Co., in the Tower Block, Saginaw, was asked by a stranger recently for two ounces of laudanum. McKee refused to give him the drug without a physician's prescription. The stranger found some less scrupulous druggist, it is thought, as he was reported missing next day.

John B. Boyle, a Detroit druggist, sold morphine pills to Mrs. L. Davis last week without an order from a physician. The woman shortly afterward died from the effects of an overdose. An investigation has been ordered. He alleges that she was a confirmed morphine eater. The law only requires him to keep a record of the purchaser and the amount sold.

Walter A. Dahl was recently arrested for robbing the drug store of Charles A. Seeley, at Lansing, Mich. He has confessed. Dahl roomed at the druggist's house and said that during the night he stole the key from Seeley's trousers pocket and then went to the store and took \$36 from the money drawer. He has been bound over to the Circuit Court on a charge of grand larceny.

Alderman James Vernor, druggist and manufacturer of Vernor's celebrated ginger ale, has sent in his resignation as secretary of the State Board of Pharmacy. His term expires January 1. Governor Rich had intended to reappoint him. Mr. Vernor's decision will be sincerely regretted by the drug trade of the State. He has been a courteous, painstaking and broad-minded official, who has given the board faithful service. He has served eight years and held every official position within the board's gift.

#### Random Notes.

Mr. Craten, formerly of Indianapolis, has opened a new store at Waynetown, Ind.

Charles McNab, has closed his Wallace, Idaho, drug store and moved the stock to Wardner and Burke.

Burglars broke into the establishment of August Dehmow, of Chicago, and carried away \$2,000 worth of goods.

E. W. Morse & Co. have moved into their new drug store in Fargo, N. D., where they will have a complete stock of drugs and toilet articles.

H. Fisher & Son, druggists and dispensing chemists of Bridgeport, Conn., have purchased the drug store of Dr. Jas. E. Hait, 181 Railroad avenue, Bridgeport.

It is reported that the store of the Druggists' Union Co., at Rockford, Ill., has been taken possession of by the sheriff on judgments confessed to the amount of \$4,000.

It is reported that W. T. Carr, a druggist of Ponca, Ok., and a deputy sheriff, has been missing with \$400 for several days and the worst is feared.

Thomas E. Greenwood, a druggist on Grand avenue, Milwaukee, was fined \$50 and costs in Justice court, Thursday, November 9, for not having a full registered pharmacist in charge of his store. The suit was brought by the Board of Pharmacy.

Louis Hillmantel, a druggist doing business at 1218 Fond du Lac avenue, Milwaukee, is said to have made a voluntary assignment to William R. Knell. The assignee furnished a bond of \$2,000, with Catherine Hillmantel and Theodore Zillmer as sureties.

H. C. Kariher, formerly of the jobbing firm of Henry & Kariher, who conducted a grocery store until recently in Champaign, Ill., has taken up the pestle again and opened a snug little pharmacy. He will be a friendly rival to his old partner, Ed. Henry, who is one of Champaign's most genial and progressive citizens.

George E. Lloyd, a druggist and erst-while real estate man, has been put under \$700 bonds to appear for numerous complaints issued by Ashland business men. He is accused of negotiating loans on real estate belonging to non-residents, which loans he would pocket, acting without authority in every instance.

Andrew J. Arnold, a druggist of Topeka, Kansas, who has an excellent business and local reputation, has been appointed postmaster at Topeka. He is about fifty years old and very highly esteemed. Although a Democrat of pronounced views, his Republican neighbors have cordial words of commendation for his qualities as a man, and it is believed that he will make an excellent postmaster.

Two cases of errors in compounding prescriptions, which occurred recently in Minneapolis, are somewhat out of the usual line. In both cases "Antiseptic tablets" (Seiler's) were prescribed and antiseptic tablets of corrosive sublimate were dispensed. In one case death ensued, while in the other the error was fortunately discovered before the medicine was used. The coroner's jury in the one case found that the patient died of scarlet fever, but it also cautioned physicians and pharmacists against carelessness in writing and in dispensing prescriptions.

C. B. Youngman, a would-be-druggist, of Wheatland, N. D., has been arrested and brought before a justice of the peace on complaint of the State Board of Pharmacy, charging him with violations of the laws regulating the sale of poisons. It seems he has been warned time and again to discontinue the sale of drugs, to which he always replied that he was complying with the State law. However, evidence was secured in the shape of two bottles, one of aconite and the other of carbolic acid, which he had sold without labels, and was produced as evidence. He pleaded guilty and was fined \$40 and costs.

H. Fuller, a druggist located at No. 2247 Clark avenue, St. Louis, Mo., complained to Mayor Walbridge recently that P. Supple, a coal and wood dealer, with an office in the neighborhood, was maliciously damaging his property. Some time ago, says Mr. Fuller, the offending party placed

a string of coal wagons in front of his (Fuller's) property. This, he says, was a piece of spite work and made it difficult for him to rent his property. He complained to the police and had the wagons removed. Now, he says, Mr. Supple has erected a huge sign for no other purpose than to cut off the view from his (Fuller's) property. He wants Mayor Walbridge to find out whether Mr. Supple has a permit to erect such a sign.

### Boards and Colleges.

**MICHIGAN BOARD.**—James Vernor, who was appointed a member of the Michigan State board of pharmacy when the board was first created in 1885, and who has served continuously ever since, announces that he will retire from the board permanently at the end of his present term, December 31, 1893.

**NEW YORK STATE BOARD OF PHARMACY,** composed of A. B. Husted, of Albany; C. H. Haskin, Rochester; J. Clitherow Smith, Plattsburgh; F. L. Norton, Delhi, and E. S. Davison, Jr., Syracuse, met on December 5th at the Powers Hotel for the purpose of marking 70 papers resulting from the quarterly examinations held on December 1 at Rochester, Albany, Whitehall, Syracuse, and Yonkers.

**CALIFORNIA COLLEGE COMMENCEMENT.**—The Board of Regents of the University of California met at the Mark Hopkins Institute of Art, San Francisco, on November 21. T. G. Phelps presided over the attendance of nine Regents. The sole business transacted was the granting of the degree of graduate of the College of Pharmacy to thirty gentlemen who had passed the necessary examination. These were Walter Wadsworth Ayres, Edward Robert Lee Bare, George Watson Burnett, Kenneth Burton Bowerman, Hubert Francis Bagley, Clarence Arthur Chapman, Joseph Henry Drossel, George Woodward Dufficy, Francis Joseph Donnelly, Oscar Hermann Folkers, George Anthony Green, Charles Porter Hirst, Walter Marshall Hedrick, William Peter Johnson, Harold von der Lieth, William Belknap McKenny, Samuel Miller McKenny, Carl Louis Mendel, John Alexander McNamera, Scollay Parker, M.D.; George Ichabod Ross Louis Henry Scherb, Joseph William Scamel, Harry Spiro, Ike Tobriner, William Augustus Upp, Rudolph Fred Vogel, Matthew Sylvester Wise, Eugene Carlisle Whiting and Samuel Leroy Waller.

**THE GEORGIA BOARD of Pharmacy** met on Tuesday November 28, in the capitol at Atlanta, to examine a class of young men. This body of pharmacists, consisting of Drs. John W. Goodwyn, chairman; S. C. Durban, George F. Payne, Harry Sharp, and H. R. Slack, secretary, examined fifteen young men. The examination was both written and oral. Ten passed and five failed. Those who passed were J. O. Baker, Savannah; E. S. Britton, N. J. Gillespie, Macon; B. F. Herring, Cordele; R. E. Kelly, William W. McAfee, Atlanta; Martin Meadows, J. W. Ridout, Macon; A. G. Scriven and J. J. Wooten, Atlanta. Mr. J. O. Baker, of Savannah, passed the best examination and was awarded the interstate license. The board adjourned to meet in Atlanta in latter part of February.

### Changes in the Wilson Tariff Measure.

The Wilson tariff bill has been amended in committee and the following changes have been made from the schedule in so far as it affects drugs, etc., as it appeared in the original draft of the bill published in these columns some two weeks ago:

Collodion from \$1 per pound to 45 per cent. ad valorem.

Ethers, sulphuric, from 25 to 35 cents per pound.

Lead and lead products changed from ad valorem to one-half the present specific rates.

Magesic fire brick, \$1 per ton. Pottery classification changed and rates made 35 and 40 per cent.

Ferro-manganese from 22½ per cent. to 10 per cent.

Malt from 20 per cent. to 25 per cent.

Chocolate confectionery from 2 cents per pound to 25 per cent. ad valorem.

Champagne restored to the present rates.

The date for the bill to go into operation has also been changed from March 1 to June 1, so as not to interfere with the Spring trade and so as to allow merchants to have sufficient time between the enactment of the bill and its enforcement to make provision for the changed conditions.

### Enterprising Perfumers.

Charles E. Thompson, of the Crown Perfumery Co., whose premises in London were recently destroyed by fire, has been interviewed by a *Chemist and Druggist* man who "nailed him while sitting on a narrow ledge in the corridor of the Holborn Viaduct Hotel" the while he interviewed him. Poor Mr. Thompson, not only to be interviewed but to be cruelly spiked to the hotel walls. Really this is worse than the American interviewer. One portion of the interview at least is interesting to our readers and that is the statement that the immense export business of the firm will not be hampered by the fire as the goods for export are made in a separate bonded factory.

I was less cruel when I met W. S. Thompson of the company at the Fifth Avenue Hotel, for while I interviewed him I did not nail him to the wall. Speaking of the fire Mr. Thompson said that while the loss entailed was about \$100,000, it fell entirely on the insurance companies. "This was but one of several plants owned by our company, and its destruction was more in the nature of an inconvenience than of a serious detriment." Temporary offices were opened the next day, and a large building secured and manufacturing begun again within a week after the fire, said Mr. Thompson. This building will suffice for the requirements of the company for the next year, during which time they will erect a large building specially designed for their needs.

Richard D. Young, well and widely known through his many years' connection with the perfume trade in America, first as head of the house of Young, Ladd & Coffin, and later on his own account, enters the New York office as manager on December 15. The company has also just opened offices in Chicago at 100 Washington street. Percy C. Magnus will continue his connection with the American branch, while Mr. Thompson himself will, as heretofore, give

his personal attention to the general supervision of the American business. Mr. Thompson's vigorous and progressive methods seem to have more than counteracted the general business depression, for the sales of the Crown Perfumery in this country have continued to steadily increase ever since he began to give the American business his personal attention.

### The Use of Trademarks.

The law of the land respecting the use of trademarks has been summarized and announced to the bar of the Supreme Court of the United States by Justice Jackson. The opinion was read in the case of the appeal of the Columbia Mill Company of Minnesota against W. W. Alcorn & Co. from the Circuit Court for the Eastern District of Pennsylvania. The Mill Company had brought suit to restrain Alcorn & Co. from using the word "Columbia" upon a brand of flour sold by the defendant, but the court refused to entertain the proceeding and dismissed the bill. From that judgment the Columbia Company appealed to the Supreme Court. Justice Jackson said that by a long line of decisions in the Supreme Court the law of trademarks was well settled. Those decisions, he said, established the following propositions:

1. That to acquire the right to the exclusive use of a name, device or symbol as a trademark it must appear that it was adopted for the purpose of identifying the origin or ownership of the article to which it is attached, or that such trademark must point distinctively, either by itself or by association, to the origin, manufacture or ownership of the article on which it is stamped. It must be designed, as its primary object and purpose, to indicate the owner or producer of the commodity and to distinguish it from like articles manufactured by others.

2. That if the device, mark or symbol was adopted and placed upon the article for the purpose of identifying its class, grade, style or quality, or for any purpose other than a reference to or indication of its ownership, it cannot be sustained as a valid trademark.

3. That the exclusive right to the use of the mark or device claimed as a trademark is founded upon priority of appropriation.

4. Such trademark cannot consist of words in common use as designating locality, section or region of country.

In view of these propositions, the justice stated, the court were of the opinion that there was no valid trademark in the word "Columbia," and the judgment of the court below was, therefore, affirmed.

### New Albuminous Iron Compound.

A patent has been granted for the preparation of an iron food compound, which it is claimed is readily absorbed in the human system and as such, a valuable addition to milk or other food in the nourishment of children and anæmics. The preparation may be used in the solid form, or as a 10 per cent. solution by dissolving it in water with the addition of a very small quantity of ammonia. The solid compound is prepared as follows: 100 parts of egg albumen are shaken with 2,000 parts of distilled water, and to this solution are added in succession 25 parts of tartrate of iron, dissolved in 250 parts of water, 100 parts of a 10 per cent. solution of sodium tartrate, and 38 parts of a 10 per cent. solution of soda lye.

The solution is heated to 90 degrees C. until a perfectly clear brownish-red solution is obtained. To remove the large excess of alkali, the solution, after cooling, is acidified with a 25 per cent. solution of tartaric acid, and again rendered distinctly alkaline with ammonia. This solution is kept for 48 hours at 90 degrees C., and

after cooling is again acidified with tartaric acid, which will precipitate the iron albumen derivative. After washing until the filtrate shows no iron reaction, the precipitate is purified by dissolving it in 1,400 parts of water and 20 parts of 25 per cent. ammonia, and after heating for 48 hours at 90 degrees C., it is reprecipitated by cautious addition of tartaric acid. The compound contains from 7 to 10 per cent. of iron.

### German Otto of Roses.

The rose plantations established two years ago in the suburbs of Leipzig have been so successful that they have been largely extended. The trees have withstood the severe weather of the recent winters and developed most satisfactorily. It is stated that great heat is objectionable in the culture, a cool temperature and a somewhat moist condition of the atmosphere being the chief conditions of a good yield. A factory has been built in the midst of the rose fields which will consume 50,000 kilos. of leaves daily, and is expected to produce as a minimum about 40 kilos. of essential oil, the estimated value of which, together with that of the rose water and pomade produced, will be from £2,000 to £2,500. Only the requisite quantity of flowers for immediate use will be gathered at any one time, and the roses will be but a few minutes in passing from the trees into the macerating receptacles. It is claimed that the oil produced in Saxony last year was better than the Turkish product, in delicacy, strength, and the lasting character of its perfume (*Kew Bulletin*, 80, 229).

### The Flora of the Philippine Islands.

There is a great absence of flowering plants, and those which do flower have, as a rule, very small blossoms, and the absence of odorous flowers is as remarkable as the absence of singing birds. Flowering orchids are abundant both in variety and numbers in the forests, but in the towns, a fair sized plant of an ordinary species cannot be procured under about 3s. By the roadside, near Manila, the principal trees to be seen are the tall and graceful betel-nut palm, bamboo, bananas, and other tropical trees and plants. Vegetables—beans and peas, for example—are grown by covering them up and protecting them from the sun by trellis work, covered with banana and other leaves, but most of the vegetables are brought from Hong Kong. There is hardly any edible fruit but mangoes and pineapples, the latter growing as commonly as weeds. The sugar-cane, coffee-plant, abaca or hemp, tobacco, maize, and rice, are the plants chiefly cultivated. As for the woods of the country, their nomenclature forms an immense list, and the better kinds of wood are too little known. Some of the woods are excellently suited for furniture, especially the "narra" wood, which has the appearance of mahogany, but is not so close in grain, while having a lighter color.—*British Consular Report*.

### A Drug Store Complexion.

The girl had a lovely complexion, but, sad to relate, it was mostly from the drug store. One day a stranger in town met her on the street, and right away he rushed to an acquaintance.

"By Jove," he exclaimed, "I passed a complexion on the street just now that was simply perfect."

The acquaintance had seen the young woman.

"Hist," he said, nervously, "don't talk so loud."

The stranger gasped.

"Why—er—um—why shouldn't I? What wrong?" he asked.

"You've committed a penal offense."

"How do you mean? What have I done?"

"You've passed a counterfeit," and the acquaintance thought he was a great faker.

### Lines to a Druggist.

The lines below were contributed to the new comic paper *Hallo* by a lady whom *The Journalist* describes as a "remarkable genius," and one from whom "great things may be looked for."

#### LINES TO A DRUGGIST.

O man of mystery and mixtures!  
Why hide thyself behind the fixtures  
While stirring up those horrid messes  
That cure (?) our bodily distresses?

Thy owl-like look defies description,  
When reading o'er each new prescription.  
Hut, know thou, we have some conception  
Of all thy manifold deception.

Bring out thy bottles, tubes and glasses,  
And mortars filled with sticky masses,  
And let us view the slow compounding  
Of drugs with Latin names high sounding.

Learn why it takes an hour to make them—  
To measure, weigh, and stir and shake them;  
And know, by sight grown comprehensive,  
Why Aqua Pura's so expensive.

Thou need'st not scowl and glare terrific  
When mixing up a soporific,  
Nor make thine art seem half historic  
In adding squills to paregoric.

Then hide no more behind the grating,  
While we grow old with anxious waiting,  
But let us see what means this Sancrip,  
Of which thou makest careful transcript.

Mix not our physic in seclusion—  
We're not misled by such delusion—  
But rather let us watch the making,  
And know what's in the stuff we're taking.

A. G. STANBROUGH.

### Newspaper Medicine.

An English pharmaceutical monthly mentions a prescription which appeared in the columns of a widely-read London newspaper as one likely to attract attention. The prescription reads as follows.

Quinine di sulph. .... 1 ounce,  
Sp. ar. amm. (simp.) ..... 8 ounces (fl.).

Dose—One to three fluid ounces in water and sherry for debility, dyspepsia, etc. See that the quinine is thoroughly dissolved.

This would have a surprising effect upon the average person, although nowadays strong measures are resorted to. A mistake of this kind is one of the worst features of this indiscriminate doctoring by means of printer's ink. Compositors are not yet quite up to drugs and their doses, and a little random reading of a proof is liable to lead to disastrous consequences. The "answers to correspondents," medically, is overdone, and reminds us of a good joke of Mark Twain's. On being applied to by a correspondent who had heard that fish was a good article of diet as brain food and asked for advice as to how much would be necessary in his, the correspondent's case, Twain replied that he could scarcely say, but he should think a whale would be sufficient—not a full-sized whale but a middling sized one. The answer was as valuable as some of these replies.

## CORRESPONDENCE.

**Pharmaceutical Nomenclature.**  
*To the Editor AMERICAN DRUGGIST:*

In response to your inquiry, I will say that I see no reason to believe the use of Latin as headings in the U. S. P. will be abandoned. I would not consider it desirable to do so.

It is true that both chemistry and pharmacy can be practiced regardless of Latin, so far as manipulation is concerned, but to be an accomplished pharmacist a man must be versed in this language.

As long as Latin serves in a general sense with other nations, it seems to me to render it necessary that we retain it in the limited sense it is now employed.

J. U. LLOYD.

CINCINNATI, O.

**The New Tariff.***To the Editor AMERICAN DRUGGIST.*

DEAR SIR: Regarding the proposed revision of the tariff, it is too early yet to predict with any degree of certainty what would be the immediate effect on business were the Wilson bill to become a law. There is no doubt in my mind as to its proving ultimately of great benefit to the people. Any measure which tends to break down the "Chinese wall" with which we have surrounded ourselves must, by removing the obstacles in the way of commerce, bring business to a more healthy and natural condition, and has therefore my hearty approval. I commend the stand you have taken on the subject of the alcohol tax. It is unfortunate that our legislators, in looking around for some object upon which to raise a large revenue, should think of alcohol as a substance upon which an increased tax would be felt least. In this they show their ignorance of the value of that article in pharmacy and the arts.

I approve of a graduated income tax as one that cannot be shifted upon the shoulders of any one else, and it is from this source rather than from a tax on alcohol that increased revenues should be raised.

Yours respectfully

H. ORNSTEIN.

NEW YORK, December 4.

**A Cutter's Detestable Scheme.***To the Editor AMERICAN DRUGGIST:*

What has become of the "Interstate League?" Has it gone to sleep or is it still in existence? I sincerely hope the latter and am anxious to see them do some good work.

I am situated at 137 Ninth avenue, New York, and my next competitor, at the corner of Ninth avenue and 17th street, is one of the "Zagat Brothers," who conduct about five stores in New York and Brooklyn and so cut prices in every direction to fairly nothing, that it seems astonishing how they manage to keep above water.

Besides cutting rates, the one whose competition I "enjoy" has a very peculiar scheme, quite unbecoming to our profession, to increase his prescription business, as you will see from the following example, which is only "e pluribus unum." To substantiate my tale of woe, I give names and dates.

On December 4 last one of my customers, Mrs. Callahan, of 453 W. 16th street, was sent by her husband, the patient, to have prescription 18927 repeated, a six-ounce throat mixture, first put up in my

store on December 1, 1893, and prescribed by Dr. Sherman.

The old lady, by mistake, walked into Zagat's store. According to the description and statement of the lady, Zagat himself told her he could not put it up without the prescription, and asked her how much she paid for it. She answered 40 cents, whereupon this big hearted and worthy member of our profession, totally ignorant as to the contents of the bottle, advised her to go to my store, ask for a copy of the prescription, bring it back to him and he would put it up for 25 cents, but, above all, she should not tell me anything about it.

Great Scott, is this greediness or is it a sign of threatening collapse?

If the "Interstate League," of which I am a member, begins the attack on the cutters, there will surely be no want of worthy objects for the black list.

PHIL. GRASSMUCK.

Pharmacist, 137 Ninth avenue.

## OBITUARY.

Chas. L. Wiggins, son and partner of Dr. L. Y. Wiggins, of Newburgh, N. Y., died at his home in that city on December 4, at the age of 26.

Geo. H. Elliott, one of the oldest and most highly respected citizens of Lockport, N. Y., died on December 1, at the age of seventy-nine. In early life he was engaged in the drug business in Le Roy.

William W. Marmon died of apoplexy at his home in Bloomington, Ill., on November 30, at the age of sixty-one. The deceased was born at Militer, Ind., and at the age of 16 entered the drug store of Paist & Luce in Bloomington. In 1856 he purchased an interest in this firm, the name becoming Paist & Marmon. Mr. Paist dying in 1874, Mr. Marmon conducted the business under his own name and with the assistance of his son Wm. L. Marmon down to the time of his last illness.

**Recent Drug Fires.**

C. M. Saber, Fort Wayne, Ind., loss \$22,000, partially insured.—King & Rhodes, Florence Ala., loss \$4,700, insurance \$3,000.—Lewis' store, Streator Ill.—Holden's store, Fergus Falls.—J. A. Brown & Co's. store, incendiary origin, fully insured.—Ellis' store, Brooklyn, Wis.—S. H. Eustis, Shelbyville, Ind., loss \$1,500, insurance \$1,000.—Bolton Drug Co., Brooklyn, loss \$12,000, fully covered.—G. L. Keeny, Monson, Mass.—W. C. Gunn, Starksville, Miss., loss \$4,000, insurance \$3,000.—Alleghany Drug Co., 81 Federal street, loss \$3,000, fully insured.—Boston Drug Supply Co., 51 Commercial street, Boston, Mass.

## Trade Notes.

Messrs. Blondeau et Cie., of London, England, the proprietors of "Vinolia" soap, pay half the fees of any employee who attends evening classes in any part of London. This ought to insure for them a good return in more intelligent service.

A new edition of Dorvault's "L'Officine" (French Dispensatory) has been published by Asselin & Houzeau, Place de l'Ecole de Médecine, Paris. No pharmacist's library can be considered in any sense complete without a copy of this important work,

and as its cost is a trifle (\$4) compared with the price of similar works in the English language, no one should hesitate about procuring a copy.

Do you know what your sales are from week to week, the proportion of cash to credit? The best book to keep you posted in these and other important matters is the "Complete Business Register." Thousands of grocers and general dealers are now using this account book. Send to the publisher, H. W. Pamphilon, 17 Clinton place, New York, for free sample sheet.

The Chemische Fabrik, vormals Hofmann & Schoetensack, Ludwigshafen on Rhine, Germany, for many years well known manufacturers of chloral hydrate (Saames' brand), salicylic acid, and various other chemical products, have discovered and are producing a new antiseptic and anti-rheumatic, salacetol, which article is meeting with merited success both in this country and in Europe. Salacetol and all other articles manufactured by the above firm are to be had of R. W. Phair & Co., 76 Pine street, New York, sole agents for the United States and Canada.

"Variola and Vaccinia" is the title of an interesting and handsomely gotten up pamphlet issued recently by the New England Vaccine Co., 294 Broadway, Chelsea Station, Boston, Mass. To physicians and pharmacists the pamphlet will be of special value as it traces the origin of smallpox from the fifth century, when the disease was first recognized, through succeeding centuries down to the present time, and contains many engravings illustrating the typical features of the disease as well as the usual methods of rendering subjects immune. A copy can be obtained free of charge by mentioning this paper.

**Grip Medicines.**

We direct attention particularly to the advertisement on page 7 of the "antipyretics" and "compounds" in the compressed form as made by John Wyeth & Bro., of Philadelphia. These have proved so eminently successful in former visitations of the epidemic "la grippe" as prompt remedial agents that now, when the country seems to be threatened with a renewal of attack, it is both timely and wise to be forearmed. The tablet form as compressed by the Wyeth process offers no impediment to solubility, the respective substances being compressed, dry, without excipient. These enable the physician to administer full, even large doses, in greatly reduced bulk and in such form as may be most readily taken and absorbed by the system.

**The New U. S. Dispensatory**

will soon be issued. The 17th edition of this indispensable guide and authority has been carefully and thoroughly revised upon the basis of the new pharmacopœia by the editors, Professors Wood, Remington, and Sadler. All the new remedies have been ably considered, both from the standpoint of the physician and that of the practical pharmacist. Matter really obsolete has been replaced by that which is now necessary, while none of the valuable features which have given such deserved popularity to former editions have been sacrificed. Orders may be sent to this office to be filled when the book is issued.

### A Handsome Office.

The New York office of the Low Art Tile Co., in the Havemyer Building, Church street, is becoming one of the attractions of that block of elegant stores and offices. The interests of the company are looked after by Messrs. Howell & Sangston, two competent gentlemen who have been connected with the retail drug trade for a number of years. The application of the principle of expansion and contraction as applied to the "hot soda" apparatus of the company was explained to me by Mr. Sangston a few days ago. It seems the regulator which forms a part of the Low Art Tile apparatus is so constructed as to deliver water at any temperature. Being wholly automatic the dispenser has only to draw the water when wanted. "While he is doing this" Mr. Sangston remarked,

beautiful Peristyle. Perhaps no one part of the grounds has been more written about and admired than that which we show to our readers in the above cut. There are special features of this picture well worth mentioning; among which is the immense statue of the Republic, as seen in the foreground, and equally beautiful is the fine arch behind it. Worthy of special mention and most interesting to druggists, is the Lowney Temple in the left hand corner close to the Music Hall end of the Peristyle. This little building was a perfect gem and without doubt the most complete thing of its kind in the grounds. It was here in this Roman Temple of Vesta with its circular form, Corinthian columns and cathedral glass windows, that Lowney's chocolates received the highest award, three medals and three diplomas. Truly this whole scene, full of rest and quiet, with the cooling lake

forty per cent. of legitimate profits, according to the popularity of the article. The invention of a New York advertising agent designed to prevent this kind of fraud will therefore meet with attention from every one interested. Briefly described the new device consists of three pieces, a thin glass cylinder, fitting closely to the inside of the neck, reaching downward about an inch, and having a somewhat contracted lower opening; an aluminum valve, cone-shaped, with its apex downward, resting in that opening; and a guard cup or thimble, inserted in the upper part of the cylinder and so perforated as to let the liquid contents of the bottle escape freely, but not admitting any wire or other tool adapted to lift the valve. This guard cup is secured to the cylinder, and the cylinder to the bottle by a water tight cement. A small cork or other stopper is fitted into



PERISTYLE AT THE WORLD'S FAIR, SHOWING WALTER M. LOWNEY & CO.'S PAVILION.

"the apparatus turns up the gas, and as the water heats gradually turns it down to the lowest burning point, at which it remains until more water is drawn." The point is made that the trouble of watching the apparatus and the annoyance of finding the water too hot or too cold is in this way avoided besides reducing the expense of heat to the minimum. The boiler is encased in one of the beautiful Art Tile cylinders and all stands above the counter with a gas and water supply pipe running up from under the latter

### The Peristyle of the World's Fair.

The above cut, which is reproduced by permission of Messrs. C. D. Arnold & Co., of Chicago, the official photographers, gives to our readers a glimpse of the east end of the court of honor walled in as it is by the

breeze blowing through those great Corinthian columns of the Peristyle, its great statue of Liberty, the beautiful music hall and casino, with the superb lagoon before it, was a place fit for anyone to linger long and gaze at. Such a scene will not soon again be offered for the American public to feast their eyes upon.

### Anti-fraud Stopper.

The refilling of proprietary bottles with goods of a cheaper and inferior quality has been a cause of much annoyance and financial loss to manufacturers. That it is extensively practiced needs no verification. According to a conservative estimate of a New York dealer in bottled goods whose experience would seem to entitle his opinion to consideration, this imposition robs the manufacturers of from twenty to

the guard cup after the anti-fraud device is put in place.

The new stopper is the invention of Willard B. Stevens, a general advertising agent of this city, who found his business interfered with by the fraudulent refilling of bottles and set about to find a remedy.

From Mrs. Agnes Booth-Schoeffel.

THE MASCONOMO,  
MANCHESTER-BY-THE-SEA, Mass.,  
July 24, 1893.

MR. PRESTON: I received your thoughtful present, and find you Portsmouth cologne salts most delicious and refreshing. It must be a boon to invalids.

Yours sincerely,  
AGNES BOOTH-SCHOEFFEL.

## Review of the Wholesale Market.

NEW YORK, December 13, 1893.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

Save in one or two special lines the market has shown a more cheerful aspect during the week under review than for some time past. Opium developed a sudden and, so far as the trade in general is concerned, an unexpected strength in the latter part of last week. South American products continue firm (with the exception of jalap which is rather easier) because of the political troubles. A few articles which are affected by the proposed change in the tariff are somewhat easier in anticipation. The volume of business reported continues small for the season, and but little improvement is to be anticipated until after January 1st as buyers wish stocks to run as low as possible for stock-taking. The further changes in the tariff bill are given elsewhere in this issue.

### DRUGS.

ARNICA FLOWERS, prime fresh, sell at 12½c. in single bale lots.

ALOE has declined under fresh competition to \$1.10 and the new comers promise to give the old makers a lively fight for a share of the orders.

BALSAM COPAIBA continues very firm and Central American has sold in the interim at 38c. in 1,000 lb. lots.

BALSAM TOLU has been advanced by some holders to 27 @ 28c. as to size of parcel, but in certain quarters 25c. will still be accepted.

BARBS.—Cascara Sagrada is dull and easy at 5½ @ 6c. as to quantity and holder. No demand is reported. Simaruba is scarce and held firmly at 35c.

BERRIES.—Cubeb have declined to 17 @ 19c. for XX, and 14 @ 16c. for ordinary.

CASSIA FISTULA is in limited supply and firm at 8½c. for full baskets and 9 @ 10c. in broken lots. The demand is good.

COCA LEAVES, Truxillo, has sold in a small way at 14c.

COD LIVER OIL is in fair jobbing demand at \$10.75 @ \$20 for new Lofoten oil. Three fish brand brings \$25 in 25 barrel lots.

CACAO BUTTER, bulk, has sold in a round lot at 33c.

ELDER FLOWERS are in limited supply on the spot and none are reported coming forward from the interior. 10½c. is the quoted price.

ERGOT is dull at unchanged prices.

INSECT POWDER is still neglected, as stocks for Spring will probably not be purchased until after the first of the year. 16 @ 22c. is the quotation.

JAPAN WAX still offers at 8c. spot, and no takers. This market has not responded to the advance in Europe.

JABORANDI LEAVES are in very light supply and broken lots only available at 40 @ 60c.

LOBELIA, new crop, is offering at 6c. to arrive.

MANNA has advanced to 28c. for sorts and 35c. for small flake under the influence of European cables. Large flake is unchanged.

MENTHOL is scarce and an active demand at the advanced price of \$4.50 for prime quality. While the supply is small owing to short mint crops the demand continues to steadily increase.

OPIUM continued dull until Friday afternoon. On Thursday cables were received of an active market both in Smyrna and London, and on Friday afternoon our own market responded by a sharp upward turn, and closed with orders plenty and prices firm at \$2.15 @ \$2.20 in cases. For jobbing lots the same figures are quoted. Powdered, \$3 @ \$3.05. It remains to be seen whether the advance is an artificial one, as it is claimed to be by some dealers.

QUININE continues to gain strength, and if the grip spreads and becomes as general as it threatens to be, still further advance may be looked for. Outside holders are said to be about exhausted, and regular dealers demand 19½c. for German bulk, at which price numerous transactions are reported. London cables a strong and active market.

SPERMACETI has sold at 29½c. in a 100 case lot for export, and manufacturers claim to be short of stock.

TILLIA FLOWERS are in scant supply and held at 17c. for old yellow and 19c. for good quality.

### DYESTUFFS.

CUTCH is very quiet at the range of 4½c. as inside for SM in round lots and 4¾ @ 5c. for jobbing quantities.

GAMBIER has been in fair request and steady at 4 @ 4¾c. ex-store. Ex-Hildekel now due with 9,317 bales, it offers at 3½c. Shipments are quoted at 3.92c. sail and 4c. steam. According to F. R. Leonori & Co. the stock in store in New York on December 1 was 5,500 bales, and in Boston 4,000 bales. There were afloat, including 221 bales in port, 15,838 bales for New York, making the visible supply for the next four months 25,838. The total deliveries for consumption from January 1 to December 1 were 101,127 bales. Since January 1, 32,231 bales have been imported from London.

SUMAC is firmer, Sicily being in very small supply, and prices have been advanced to \$75 @ \$77.50 for spot and \$73 @ \$77 to arrive, some 400 bags to arrive having been sold at the figure quoted. Virginia is firm and selling at \$47.50 spot.

### CHEMICALS.

Heavy English chemicals are quiet with but few inquiries and fewer transactions. English bleaching powder is selling in a small way at 2½c and French at 3c. from second hands.

BROMIDE OF POTASH is offering in bulk from second hands at about 36½c., a shade under manufacturers' prices.

BLUE VITRIOL stiffened up because of exportations to Italy, but this soon stopped and the market is now dull at 3¼ @ 3½c.

BARIUM NITRATE has declined to 5½c. in barrels and 6c. in kegs.

CITRIC ACID continues to offer from second hands at a fraction below manufacturers' quotations.

CREAM TARTAR and tartaric acid continue dull and quiet. From second hands tartaric acid can be had at 22½c. in 5-barrel lots.

CHLORATE OF POTASH showed some activity early in the week, but at the close was quoted at 14½c. and quiet. London cables higher market there.

OXALIC ACID has been quite active and has advanced to 6¼ @ 6½c. as to holder and quantity.

POTASSIUM PERMANGANATE has declined to 17½c.

QUICKSILVER is in fair demand and firm at 51 @ 52c.

### ESSENTIAL OILS.

PEPPERMINT OIL absorbs a considerable portion of the attention of the trade both here and in London, if the reports given out as cabled over are to be accepted as correct. London cables advances equiva-

lent to \$3.11 net here for HGH and there have been shipments of both bulk and case oil to Europe. Bulk western is quoted at \$2.45 @ \$2.50, Wayne County at \$2.60 @ \$2.65 and while some quote \$3.10 for HGH case oil a little could be picked up at \$3.

TANSY has advanced and is quoted at \$2.50 @ \$2.75.

MESSINA ESSENCES generally are easier at the approach of the new crop season.

### GUMS.

ARABICS are jobbing fairly well at full previous prices.

ASAFETIDA is quite firm under reports of very scant supplies in the London market. Fair quality gum has sold here at 25c.

BENZOIN has declined to 30 @ 33c. for prime under increased stocks.

CHICLE has advanced under strong inquiry, and is quoted at 28 @ 30c. A large lot has changed hands and been withdrawn from the market. The principal holder has withdrawn from the market.

SHELLAC is held with confidence, the statistical position favoring holders, though there is very little demand.

TRAGACANTH is steady, reflecting the tone of the London market, though but little business is being done.

### ROOTS.

GOLDEN SEAL has sold for export at 21½c. For spot stocks 22 @ 23c. is asked. Sales in the interior are reported at 21c., though some country holders ask more.

IPERCAC is strong and in fair request at \$1.35 @ \$1.40. London is reported firmer on the basis of increased demand from this side.

JALAP is easier at 24 @ 25c. and little inquired for. It is reported that considerable lots are about due both at Hamburg and London and this is being used to depress this market.

JAMAICA GINGER, unbleached, is in fair demand, and the light stocks make holders firm in their quotations of 14 @ 17c.

ORRIS has advanced abroad, no cheap goods being allowed on the market by the syndicate. On the spot good Florentine sells at 24c. and prime Verona at 15c.

SENEGA is dull and neglected both by dealers and exporters. A little Southern senega is wanted for export. For Minnesota 42½c. is asked spot, or 37½c. f. o. b. Minneapolis. Manitoba is quoted at 41c., but the whole line is weak.

TEXAS SNAKE has sold at 28c., and for small stocks left still more is asked.

MEXICAN SASSAPARILLA remains firm save for one lot offered from St. Louis, part of which sold at 9½c. In a jobbing way 10½ @ 11c. is wanted.

### SEEDS.

CANARY has advanced to 2¼ @ 2½c. for Smyrna, and is firm at the advance.

CARAWAY has improved in tone and for good Dutch 6½c. is the ruling quotation.

CARDAMOMS are a little higher and very firm.

MUSTARD, California is reported strong from the Pacific coast, but this market does not respond. Prices are steady—4c. for yellow and 3½c. for brown.

The Commissioners of Charities and Correction of this city invite bids for furnishing the department with hospital supplies. The articles enumerated include 4,000 gallons of pure rye whisky, 6,500 pounds of carbolic acid, 3,000 ounces of quinine, 1,500 pounds of chloroform, 1,300 ounces of phenacetin, 600 ounces of antipyrine, 135 ounces of morphine, 40 barrels of cod liver oil and 500 pounds of chloral.

# American Druggist and Pharmaceutical Record.

A JOURNAL OF PRACTICAL PHARMACY.

VOL. XXIII. No. 25.

NEW YORK, DECEMBER 21, 1893.

WHOLE No. 278

## AMERICAN DRUGGIST PUBLISHING COMPANY.

37 COLLEGE PLACE, NEW YORK.

A. R. ELLIOTT, PRESIDENT.

|  |        |
|--|--------|
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*Liberal Commissions to Club Agents.*

### THE ALCOHOL TAX AGAIN.

THE future of the alcohol tax is not settled, as no report has yet been made by the sub-committee on internal revenue of the Ways and Means Committee of the House of Representatives, but it is rumored that the probabilities of an increased tax are considerable. J. M. ATHERTON, the leader of the Bourbon distillers of Kentucky, was in Washington last week, and immediately after his return to Louisville his own and a number of other large distilleries started up presumably as a result of knowledge gained as to the probable action on the alcohol question.

It is estimated that the stocks of spirits now in bond would be sufficient to supply the demand, possibly outside of pure alcohol itself, for nearly three years. The distillers will increase this stock as rapidly as possible while the question is in abeyance so long as they think the change will be made. The action of the Bourbon distilleries proves that. As soon as the bill passes, and before it goes into effect, practically all the stocks in bond will be withdrawn at the old low rate, and all of this will be sold to the public at the same price, or nearly the same price, as though it had paid the new high rate of taxation. As we have over two years' supply in bond this means that until that supply is exhausted the government will not receive any higher rate of taxes save on a comparatively insignificant proportion of the whole amount of spirits consumed. The payment of the tax on the large amount of spirits in bond would, of course, give a considerable quantity of ready money to the government at the moment, but this

would be merely forestalling the receipts for two years subsequent.

The consumer in the mean time would be paying the advance, which would go into the pockets of the whisky trust and the distillers instead of into the coffers of the government.

If liquors used for beverages alone were affected the injustice would be possibly as great, but would not especially concern the drug trade. But it affects alcohol also, an article almost, or in the present condition of pharmaceutical knowledge, quite indispensable to the conduct of pharmaceutical manufacturing.

Is it not possible to devise some means by which we can have alcohol for medicine and the arts at a lower rate of taxation? If it were feasible the increase in its consumption by reason of the growth in our chemical manufacturing industries would, we feel sure, go a long way toward keeping up the revenue from this source to its present figure or possibly to raise it. This is the problem which each of our readers should force upon the attention of such of the national legislators as he may know.

THE ingenuity of the medical expert witness of the day requires for its most brilliant effects contact with the keen intellect of the medico-legal expert as does the flint the steel. Dr. W. J. O'SULLIVAN in both the BUCHANAN and the MEYER cases has made a most brilliant record as a medico-legal expert in the handling of expert witnesses.

THE lanoline case referred to in a recent issue, so we are informed by cable, has been decided in favor of Messrs. Benno Jaffe & Darmstaedter. The decision as reported protects the manufacturers of lanoline in their exclusive right to manufacture wool fats for medicinal purposes. We will lay before our readers in our next issue a more complete review of this case.

EVEN emptiness itself is not proof against the promoter of trusts, for now we have a trust of makers of empty capsules, and, moreover, a full grown and vigorous one that, before it is out of its swaddling clothes, before even it has been christened, advances the price of empty capsules at wholesale some fifty or sixty per cent. Alas for you takers of quinine, you sufferers from grip and ague; you denizens of dengue infected districts; you must either pay the exorbitant demands of the trust or must take your matutinal quinine as you do your whisky—straight.

## PHARMACEUTICAL NOTES.

**Bleaching Yellow Wax.**—The process usually followed consists in exposing the wax in fine threads to the sunlight. An improvement consists in first reducing the wax to powder. This is accomplished by passing the melted wax into a hot cylinder whence it is "sprayed" under a pressure of ten atmospheres. The "spray" is received in a stream of cold air which causes the fine particles to congeal separately.—*Seifenfabrikant*.

**Coloring Brass.**—According to O. Pfeiffer beautiful shades from light brown to black may be obtained by cleansing the brass article thoroughly, and immersing it in a solution of one part of copper nitrate and two parts of ammonia water. The depths of color will depend upon the length of time the article is immersed. By brushing the article over with wax or vaseline a polish is imparted. When colored, lighter tones may be produced by dipping in dilute acid. (*Zeit d. öst. Apoth. Ver.*)

In Paris a novel apparatus has been fixed in front of the windows of a few shops, pioneering the way for the introduction of the invention. It consists of a small pipe laid along the exterior of the shop window, and from this, through numerous holes, is emitted a gentle current of warm air, slightly scented, which is very agreeable to the shop window gazers to sniff, while it keeps the windows clear and bright, thus more effectively displaying the contents.

**Zinc-Lanoline Paste.**—The formula below is recommended highly by a German dermatological journal in the treatment of acne, sycosis, rosacea, and other troublesome affections of the skin:

|                  |       |          |      |
|------------------|-------|----------|------|
| Oxide of zinc.   | ..... | ss (4.0) | 3 i  |
| Powdered starch, | ..... |          |      |
| Lanoline.        | ..... | ss (3.0) | 3 ii |
| Olive oil.       | ..... |          |      |

from different parts of the country, which corresponded well with these requirements. That the practice of fraud in connection with this article has not entirely ceased may, however, be shown by one excellent example.

**Varnish for Japanned wares** may be made by dissolving 40 grammes (617 grains) of button lac and 40 grammes (617 grains) of light rosin in 1 liter (2.2 pints) of strong alcohol, and allowing the solution to clear. The varnish and the article to which it is to be applied should both be warmed when used. Two coats should be applied, the first being thoroughly dried before the second is put on. When the coating is sufficiently thick it should be polished with tripoli or finest powdered pumice. For black japan lac dissolve 20 grammes (308 grains) of genuine asphalt in a little warm boiled linseed oil, rub up 40 grammes of burnt umber with another portion of oil, mix and dilute with sufficient boiled oil to make 1 liter (2.2 pints), and then dilute this as may be required with oil of turpentine.

**Rubia Sikkimensis.**—Perkin and Hummel have examined the coloring principles of the root of this plant, which yields a brilliant red dye, used by some of the hill tribes of India. The root was extracted with boiling alum solution, and yielded a red crystalline compound having all the properties of purpurin, another apparently identical with the munjistin, or purpuroxanthincarboxylic acid, obtained by Stenhouse from munjeet, *Rubia munjista* (*R. cordifolia*), and a third substance, which somewhat resembled purpurin, but was not obtained in sufficient quantity to enable its constitution to be determined. A yellow mass of crystals was also separated which seemed to be identical with purpuroxanthin. Almost identical results were obtained when munjeet was examined on similar lines (*Journ. Chem. Soc.*, lxiii, 1157).

## Notes, Queries and Answers.

Under this heading we shall, to the best of our ability, endeavor to answer such questions addressed to us as come within the scope of this journal, provided they are accompanied by the name and address of the writer. Unless special instructions to the contrary accompany the query, the initials of the correspondent will be quoted at the head of each answer.

When asking for the formula of an unusual, patented or proprietary compound, always accompany the query with any information you may already possess regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, send also a specimen of the label used on packages of the compound.

## Dieterich's Milk of Magnesia. T. M. B.—

|                      |                            |
|----------------------|----------------------------|
| Magnesia, burnt..... | 20 grammes (154 grains)    |
| Glycerin.....        | 40 grammes (1½ fl. dra.)   |
| Water.....           | 100 grammes (26½ fl. dra.) |

Rub the magnesia with the water, adding it gradually, and then add the glycerin.

**Chartreuse.** N. A J., New York.—The following has been recommended as producing something very like the genuine liquor:

|  |            |
|--|------------|
| Oil of angelica.....                     | ss minimis |
| Oil of cajuput.....                      | ss minimis |
| Oil of calamus.....                      | ss minimis |
| Oil of cloves.....                       | ss minimis |
| Oil of coriander.....                    | ss minimis |
| Oil of hyssop.....                       | ss minimis |
| Oil of mace.....                         | ss minimis |
| Oil of melissa.....                      | ss minimis |
| Sugar.....                               | ss ij      |
| Alcohol.....                             | ss viij    |
| Water.....                               | ss iv      |
| Tincture of saffron sufficient to color. |            |

If green chartreuse is desired add a few drops of solution of indigo to the above.

**Magisterium Sulphuris.**—J. O. J., Boston, writes: "Will you kindly inform me if Mr. Lascar is correct in stating (see A. D., Oct. 26, page 239) that magisterium sulphuris is washed sulphur, and if so, what his authority is? Both the National and U. S. Dispensatories would lead one to suppose that it stood for precipitated sulphur."

On submitting the question to Mr. Lascar he makes the following observations:

"In reply to your inquiry regarding my statement that in my paper 'Altered Copies' I hold that, in the prescription mentioned, by magisterium sulphuris washed flowers of sulphur was meant, let me state that I still adhere to this opinion. I am aware of the fact that the dispensatories state that precipitated sulphur is also known by the synonyms of lac and of magisterium sulphuris, but I have also found that in standard works of earlier dates that by magisterium sulphuris the washed sulphur is indicated.

In instances, as described by me in my paper, where the object seems to be solely to create a confusion, and also to drag misleading synonyms from their ancient tombs, it appears to me but rational to look for the oldest dates when such were in vogue. I readily admit that from a scientific point of view your correspondent is correct, for by magisterium is generally understood a precipitate formed from a saline solution either by the addition of water or by other chemicals. But let us not forget that by the term magisterium once was understood certain medicines of which the formula was a secret. I refer to a most excellent work on medical science, Robley Dunglison's Medical Lexicon, fifth edition, 1845, page 439; Lea & Blanchard, Philadelphia. Magisterium Sulphuris—Sulphur lotum, also a mixture with potassæ acetat—Tartari purgans.

## News and Notes.

### Random Notes of a Southern Journey.—II.

#### RICHMOND.

The line of the Richmond, Fredericksburg & Potomac Railroad between Washington and Richmond takes one through a district which was the scene of many notable engagements between the Confed-



T. ASHBY MILLER, PH.G.,

Chairman of the Faculty and Professor of Pharmacy, Richmond College of Pharmacy.

erate and Union soldiers during the civil war, and the tourist who is at all interested in the history of his country with reference to the campaigns of the "war between the States" finds much to occupy his attention. After leaving Alexandria the railroad skirts the right bank of the Potomac to Quantico, where it runs along the edge of the "Wilderness," a barren and unattractive stretch of ground where Grant made his memorable campaigns against Lee's army in the "Battles of the Wilderness" during May, 1864. The number of men killed on both sides is estimated as above 60,000.

The road crosses the Rappahannock at Fredericksburg, which was the scene of the famous battle of Fredericksburg, in which General Burnside was defeated by the Confederates under Lee. The city is old-fashioned and picturesque, but its private residences and public buildings show many traces of the ravages of time and the elements. The old-fashioned brick houses adjoining the right bank of the river appear to be in a ruinous condition, but are quaintly picturesque from their odd style of architecture and peculiar foundations, which consist of large brick pillars having a decidedly lean-to appearance. The fact that George Washington spent his boyhood near here gives the place added attraction. But it derives its chief interest from the many battles which were fought in its vicinity. The Union forces under General Hooker were defeated at the Battle of Chancellorsville, 11 miles to the west, with a loss of 17,000 men, on May 2, 1863, it being in this engagement that "Stonewall" Jackson received his death wound. A little to the south is Spottsylvania Court House, the center of some of Grant's operations in 1864.

Richmond, the capital of Virginia, is a city of some 81,500 inhabitants, and supports five wholesale and jobbing drug firms and sixty-four retail druggists. Among the more prominent of the latter are T. Ashby Miller, Polk Miller Drug Co., A. T. Snelling, F. N. Curd, A. W. Nolting, G. Barksdale, R. H. N. Harrison, J. H. Lewis, J. T. Lewis, A. W. Nolting, J. W. Pierce and J. N. Willis.

T. Ashby Miller, who is a graduate of the class of '83 P. C. P., has one of the finest prescription and general drug businesses in Richmond. He is young, enterprising and a hard worker, and to him is due much of the success of the recently instituted Department of Pharmacy of the Richmond College of Physicians and Surgeons. Under the guidance of Mr. Miller I was shown through the different lecture rooms of the college and inspected the pharmaceutical and chemical laboratories. The latter are well lighted and fairly spacious rooms capable of accommodating over 50 students. The pharmaceutical laboratory contains four wide benches which extend the entire length of the room and are fitted up with every modern appliance for the prosecution of general laboratory work. These include



ANDREW T. SNELLINGS, PH.G.,

Professor of Materia Medica, Richmond College of Pharmacy.

gas and water connections with a sunken trough of lead for carrying off waste, Blackboard demonstration is of course a feature of the curriculum and a number of interesting examples of galenic formulae were displayed at the time of my visit. Tincture of digitalis was the preparation of the day, and samples of students' work in the shape of specimens of the tincture in different stages of percolation were exposed on the different benches.

The school has only been opened since July of this year, but the pharmacists of the State are displaying considerable interest in its progress and a fair number of students are already in attendance. The fact that the college is presided over by the famous surgeon Dr. Hunter McGuire gives assurance that its affairs will be properly managed; and as the students are required to manufacture all of the preparations used in the Virginia Hospital, which forms part of the college building, there is little danger of its graduates ever finding

themselves unfamiliar with the practical duties of an apothecary.

The building of the school of pharmacy faces on ground regarded as hallowed and sacred by the Southern people, for opposite it to the left is the former residence of Jefferson Davis—commonly known hereabouts as the White House of the Confederacy, while to the right range the buildings once occupied by the members of the Confederate cabinet.

The Virginia Hospital abuts on the college building and through the courtesy of Dr. B. K. Hays, acting house surgeon, who by the way is a brother of Frank B. Hays, of New York City and a native of Oxford, N. C., I was shown over the entire building and found much to admire from its elegantly appointed waiting rooms to its clean and comfortable wards with their prettily attired nurses.

The drug department of the hospital is under the superintendency of T. Ashby Miller, and is a neat and unpretentious little structure. In the dispensary proper separate waiting rooms are provided for white people and negroes, and this segregation of the races appears to be practiced in many other places throughout the South. Mr. Miller tells me that if any of his white customers should see him serve a negro with a glass of soda water, he would from that moment be no longer patronized by that customer; so he invariably refuses to dispense soda water to negroes; medicines and necessities, however, he will dispense in any quantity. Mr. Miller has a novelty in his pharmacy which takes the shape of a large octagon-shaped fish pond about 5 feet in diameter stocked with gold fish. The muddy color of Richmond water is not favorable to a good effect, however, as it is difficult to make out the fish through the haze of mud.

By all odds the most popular druggist in Richmond is Polk Miller, of the Polk Miller Drug Co. He conducts a wholesale and retail drug business under the firm name, and manufactures a number of val-



T. WILBER CHELF, PH.G.,

Professor of Chemistry, Richmond College of Pharmacy.

uable veterinary specialties. It is as a public entertainer, however, that Mr. Polk is so widely and favorably known in Richmond and elsewhere throughout the South. To a select audience,

composed of myself, A. R. Elliott, president of the American Druggist Publishing Co.; T. Ashby Miller, James M. Valentine, of the Valentine Meat Juice Works; and Eugene H. Clowes, he gave a number of delineations of the negro character, illustrative of the peculiar dispositions, habits and character of the negro of the olden times, and introduced many amusing anecdotes, showing the sunny side of the "old issue darkey." He also sang a few plantation melodies, accompanying himself on the banjo. Of Polk Miller, Thomas Nelson Page has said that "he can tell a negro story better, and give the negro dialect better, than any one I know." And this testimonial to Mr. Miller's knowledge of the negro I can fully indorse.

The drug business in Richmond is making a slow recovery from the general commercial depression which has diminished the receipts of druggists everywhere; but the spirit of enterprise and progress which distinguishes the business men of Virginia's capital is sure to assert itself, and every one spoken to on the subject is confident of a speedy return of business prosperity. The city is extending in all directions and through the liberality of Major Louis Ginter, one of its most public spirited citizens, who has laid out roads and instituted many important public improvements, is fast regaining and bids fair to surpass its former prestige.

THOS. J. KEENAN.

[We are indebted to the courtesy of the *Druggists' Circular* for the illustrations]

### The Meyer Murder Case.

But for the sudden illness of one of the jurors a decision would by this time have been rendered in one of the most celebrated murder trials of the decade, namely that of Dr. Henry C. F. Meyer.

The story, as told by a man named Mueller, claiming to be a party to the transaction, and who has turned state's evidence, is briefly this: Meyer had taken out several large policies on Brandt's, alias Baum's, life; the latter was given some medicine (antimony and croton oil) to make him appear sick, and a physician called in. The case was diagnosed as one of dysentery, and Baum eventually died and was buried. Baum had agreed to impersonate a sick man without realizing the position of danger in which he was placed, until unable to protect himself. Mueller, at the command of Dr. Meyer, administered antimony in small doses to the patient for several weeks, and also administered arsenic for several days immediately prior to his death. This is Mueller's story.

The prosecution exhumed a body, claimed to be Baum's, from which arsenic and antimony were recovered in appreciable quantities.

The fact that the accused is a physician, as well as the nature of the evidence offered, makes the case of interest to our readers. Among the experts examined were Professors Chas. A. Doremus, of New York City; Chittenden, of Yale; Peabody, of New York City; Horatio C. Wood, of Philadelphia (editor of the U. S. Dispensatory); R. A. Witthaus (author of *Witthaus' Chemistry*); and Dr. Frank B. Vanderbergh, of Buffalo, and Drs. Byron and Herold, pathologists of New York, and George Ramsay, of Hegemann & Co., New York City.

The medical and chemical interest centered in the evidence adduced pro and con as to antimonial and arsenical poison. The historical part of the case we will not touch on. The attending physician in the case, Dr. Minden, had had considerable experience with combined antimonial and arsenical poison among the ore smelters of Colorado. The defense argued that this experience would have enabled him to readily distinguish such a case from one of dysentery.

The prosecution started out to prove a case of chronic antimonial poison aggravated by arsenical poison either acute or sub-acute. Pathological examination of the remains said to be those of Baum failed to reveal the lesions of either acute



W. J. O'SULLIVAN, B.A., M.R.C.V.P., M.B., LL.B.

or sub-acute antimonial or arsenical poison. The experts described the pathologic changes following the prolonged administration of the two poisons as similar, consisting mainly of fatty degenerative changes of the different internal organs of the body, notably of the liver and kidneys. During these changes the organs increase considerably in size and weight and become very much paler. The organs were found to be healthy in appearance, normal in size and weight, and not to present evidence to the pathologists of chronic antimonial or arsenical poison as usually observed and described.

Acute antimonial and arsenical poisoning are characterized by intense inflammation of the stomach and intestines, the mucous membrane of both showing erosions and ulcerated areas. The testimony of the pathologists showed that they found the

surface of the mucous membrane of the stomach and intestines normal in appearance and pallid as would be the case when death had been caused by any wasting disease, as dysentery or consumption.

The defense also claimed that the symptoms, particularly the pulse, the temperature and the character of the stools of the patient, were those of dysentery and not of metallic poisoning.

The defense also showed that no scientific chemist could, in the present state of our knowledge, state positively or even by inference whether or not any poison found in a body had been introduced before or after death. In this case the body was exhumed and the examination made four months after death. It had been claimed that arsenic was never found in the brain unless it had been introduced during life, but it has since been demonstrated that the longest time required for it to reach the brain by imbibition and osmosis after being placed in the stomach of the dead body was fourteen days even when the body was in an erect attitude.

In 1881, in the Burnham case in Buffalo, the chemist for the prosecution testified positively that the poison found had been introduced in life, whereas it was afterward found that the body was that of a person who had died of natural causes and which had been preserved for the dissecting room of a medical college.

It is claimed that, from the location of the poisons in the dead body, their limited distribution by post mortem imbibition, and their location in the gastro intestinal tract, putrefactive changes must have existed prior to the introduction into the dead body of the arsenic and antimony found.

Mueller had testified to administering to Baum some 16 capsules in four days containing arsenic. Mueller identified No. 2 as the size used. George Ramsey, of Hegemann & Co., pharmacists, was called to the witness chair, filled one of these capsules with arsenic and weighed it, and found that it would hold 26 grains of arsenic. The defense argued that death would have followed immediately if one of these capsules full of arsenic had been administered.

The counsel for defence are Chas. W. Brooke, Dr. W. J. O'Sullivan and L. S. Chandler. Dr. O'Sullivan first attracted general attention in this city in the Buchanan case, where his masterly handling of the expert testimony won immediate and world-wide recognition, and he it is who has handled the expert testimony in the present case. As shown by an engraving herewith, taken from his latest photograph, Dr. O'Sullivan is a handsome man, of fine and commanding appearance. He is above the medium height, has wavy flaxen hair, an auburn mustache, and a ruddy—not florid—complexion. His voice is full and mellow, his manner polished and easy and his style argumentative. He has the degrees of B. A. Edinboro, M.R.C.V.S. University of London, and M.B. and LL.B. Yale. He was at one time State Veterinarian of Massachusetts, and later practiced medicine and then law in Connecticut and became a member of the New York Bar some two or three years since. His knowledge of forensic chemistry is really remarkably wide and accurate and his methods brilliant and original.

## Gotham Gossip.

Paul Balluff's successors will open a branch store at Eighty-fifth street and Columbus avenue in the near future.

Reeder Brothers, both of whom are N.Y. C.P. men, have bought out Theo. Angelo at Fourth avenue and Thirty-first street.

C. F. Dyna, formerly with J. E. Williams, of East New York, is now with J. Sidley at Ninety-fourth street and Columbus avenue.

Mr. Tomas, formerly of Ninety-fourth street and Columbus avenue, is about to open a new store at Sixty-fifth street and Columbus avenue.

C. H. Duffy, class of '79, N.Y.C.P., who also graduated from the University Medical College last year, has opened a store at 1973 Second avenue.

Mr. Braecklein, of the class of '91, N.Y. C.P., is absent on a visit to his old home in Kansas City, Mo., whence he is expected to return a Benedict.

I am informed that the report to the effect that an unlicensed clerk had been dispensing at Bongartz's old stand at 581 Ninth avenue is an error.

Otto Edler, formerly manager of the East New York Drug Co., is now with Hardenburg & Angus at Seventy-fifth street and Columbus avenue. Mr. Edler was an active member of the Kings Co. Society and will be much missed should he absent himself from its meetings.

It is reported that Leo Jaffe has sued the Townley Drug Co., of Newark, for \$5,000 for having sold him cod liver oil containing potassium cyanide, which had been added to whiten (?) it. It is said the company claim that they bought the preparation which they sold from a reputable Detroit firm.

Pastor, the leader in the pharmaceutical swindle in Boston detailed in another column, is not unknown here. He was a graduate of the New York College of Pharmacy and purchased a store in East New York. He ran up considerable bills with several of the wholesale drug houses and then quietly disappeared.

It is very seldom indeed that a well marked and well authenticated case of petechial hemorrhage occurs, and much interest was excited by an attack of this malady on Edward Dunn an employee of Munro the publisher, in this city, last week. Dunn had been in perfect health up to Wednesday evening, when a fellow employee noticed that blood was oozing from the pores of the skin of his chin. A similar flow was observed from the upper part of the arm. The exudation continued for some three hours and the patient resumed work as usual on the following day.

## The Drug Trade and the Tariff.

The following letter has been forwarded to Mr. Wilson, chairman of the Ways and Means Committee of the House, in Washington, by the New York Board of Trade and Transportation:

DECEMBER 14, 1893.

Mr. William L. Wilson, chairman Committee on Ways and Means, House of Representatives, Washington, D. C.:

The following resolution was passed today by the Committee of Importers, drug trade section, of the New York Board of Trade and Transportation:

"Resolved, That proper steps be taken in order to secure a change in the Wilson

tariff bill as at present reported so as to provide for specific duties on all chemicals and drugs for medicinal use.

"Resolved, That this action be at once communicated to the chairman of the Committee on Ways and Means of the House of Representatives at Washington for consideration on the grounds of the argument hereinbelow set forth."

It is apparent from the Wilson tariff bill that its framers are of opinion that ad valorem duties are, on the whole, a more just taxation than specific duties—more just to the people. Against this premise and the conclusion drawn from it in the text of the bill the importers have, on the whole, nothing to contend. Yet in their view an exception from the above principle should be made for medicinal chemicals and drugs, for the following reasons:

First—Specific duties, as a matter of record, do invariably favor the importation of the better and best qualities, whereas ad valorem duties just so certainly will promote the traffic in inferior and poor grades of goods.

Second—But with medicinal substances more than with any other class of merchandise quality is of supreme importance; in fact, their entire efficacy for the intended purpose depends in most instances on their being of very superior quality. A deterioration so slight comparatively as scarcely to be of noticeable effect in other goods may utterly vitiate or nullify the desired action of a medicine. It may even turn an otherwise life saving agent into a direct poison. Thus the ad valorem principle as applied to medicinal chemicals and drugs must, by inviting cheap grades, infallibly exercise a constant tendency of hurtfulness to the health and lives of all our people.

Third—Inasmuch as, therefore, in medicine the best is none too good for anybody if the patient is to be benefited, it follows that the poor and the rich have the like need for highest quality in this class of goods; and that hence it would in this instance work no relief but great injury to the poorer strata of our people to adopt the otherwise well applicable ad valorem principle. The exception here asked for, on the contrary, would heighten the life chances of every man, woman and child in our land and guarantee a more healthful and happy condition to our nation as a whole.

Therefore the importers of our branch of trade, as represented by the undersigned earnestly hope that the Ways and Means Committee will make the change above petitioned for.

|  |  |
|--|--|
| J. H. STALLMAN, Chairman,<br>of Stallman & Fulton,       | Of<br>Committee<br>of Import-<br>ers of<br>Chemicals<br>and Drugs,<br>Drug Trade<br>Section. |
| THEODORE WEICKER,<br>of Merck & Co.,                     |  |
| WILLIAM S. MERSEREAU,<br>of Wm. H. Schieffelin<br>& Co., |  |
| VICTOR KOECHL,<br>of Schulze-Berge &<br>Koechl,          |  |

The "Holiday number" of our valued exchange, the *Confectioners' Journal*, which reached us on the 1st inst., compares favorably in point of excellence of lithographic effect with many of the more pretentious "Christmas numbers" of the standard monthlies. The *Journal* is evidently prospering under the able direction of Editor E. Heintz.

## A Fraudulent Registrator in Massachusetts.

A pharmaceutical sensation has been offered the public by the recent exposé of the fraud which had been perpetrated upon the Massachusetts Board of Registration in Pharmacy as a means of securing one of the coveted certificates of registration. This case of deceit culminated on the 13th of December in the arrest of the guilty parties, Leonard J. Pastor, aged 24, and Eugene Levitan, aged 21, both of Russian birth. Confession had previously been secured from both men. Pastor is charged with forgery and Levitan with being an accessory.

Levitan was born in Riga, Russia, and has been in this country one year and a half. Last February he entered the employ of Israel B. Kronberger, 100 Salem street. At that time the young man was wholly unacquainted with the rudiments of the drug business, but his natural shrewdness soon resulted in his becoming useful about the store. A few weeks employment developed Levitan's desire to be proprietor of a drug store and during last May he announced to his employer his intention of going to the office of the Board of Pharmacy to obtain a certificate of registration. To this remark Mr. Kronberger paid little attention, but his surprise was unbounded when a few days later Levitan exhibited a certificate from the board, which he said was the result of the successful examination which he claimed to have passed. Four months later Levitan left Kronberger's employ and secured work with the "Columbia Chemical Co.," 906 Washington street, where he remained for about two months. His discharge from this clerkship was wholly due to his unscrupulous methods in dealing with customers, and not through any lack of knowledge of the business. In fact he is said to be remarkably proficient for one whose experience has extended over so short a time.

Marks Chavinsky, 29 Leverett street, was Levitan's next employer. A few weeks ago the latter formed a partnership with Joseph Pettuck, and the firm assumed control of the drug store at 83 Leverett street.

At about this time Levitan made a fatal mistake by making a confidant of his former employer, Kronberger, and to him he detailed the method by which he secured his certificate. It was to the effect that a friend named Pastor had represented him (Levitan), at the May examination.

Kronberger did not keep the secret long—too much of his custom was going to the new store—and he was the instigator of the investigation which the board began.

It was discovered that Pastor's home was in Troy, N. Y., and that he came to Boston from Brooklyn last April; he made Levitan's acquaintance at a boarding house. The originator of the scheme is not known, but Pastor needed money and Levitan agreed to pay him \$50 if the plan succeeded.

Pastor's experience well fitted him for such an examination; he is said to be a Ph. G., N. Y. C. P., and to have certificates of registration from New York city, (Oct. 13, '90), Kings county, N. Y. (Oct. 22, '90), and Jersey City (March, '91).

Levitan notified the board in his own handwriting, on May 6, of his desire to be examined. On the day set for the ex-

amination Pastor appeared, and President Whitney remarked the discrepancy between his apparent age and the age he registered under the name of Levitan (21), but the matter was soon forgotten.

Pastor was successful in this examination. He failed only in the identification of drugs. His average percentage, however, was higher than that required by the board.

And so Levitan secured his certificate, and Pastor his reward, \$50.

September came and Pastor appeared before the board again, but under his own name, with mustache shaved off and dressed in a different suit of clothes.

Although disguised in this manner he was partially recognized by President Whitney, but when questioned he denied having been before the board previously.

His chirography was so changed that an expert would be required to detect any similarity in the two sets of papers. This time he attained an average of 82, and certificate 3550 was issued to him.

In October Pastor went to New Hampshire and was examined by the board of pharmacy of that State with the usual result—success. Here he acquired the reputation of being skilled in passing these trying ordeals.

As a result of Kronberger's communications to the board, and an examination of the records together with a comparison of the same with Levitan's handwriting, the case was submitted to the district attorney, who in turn referred the subject to a police inspector for investigation.

Levitan was then brought to the rooms of the board, where he at first denied all complicity in the affair, but a judicious comparison of his scraggly script with the "Eugene Levitan" which Pastor had penned at the top of one of the examination papers disturbed his equanimity to such an extent that he broke down and confessed, after which he was locked up.

The inspector then went to Pastor's place of business, 157 Washington street, and conducted him to police headquarters. Pastor confessed when informed of Levitan's arrest.

This precious pair appeared in court on the following day (14th), and were held for the January term of the Grand Jury, at which time the charges which will be brought against them will be formulated.

Now a peculiar question arises: What is to be done with Levitan's certificate, which was secured through fraud? It is the undoubted intention of the board to annul it, but can it be legally done? Is it possible to annul a certificate which does not legally exist? It is plainly evident that Levitan was not entitled to a certificate, and that the same was issued not in accordance with the law. From this point of view, is Levitan registered in this State? Indications are wanting that he is. This seems to solve the problem most satisfactorily.

Pastor's arrest brings a Pharmaceutical Preparatory School to light. He established it two months ago with William E. Morgan as his partner.

Pastor conceived the idea and convinced Morgan of its feasibility; the latter furnished the money for the plant and the former is said to have supplied the brains.

Its purpose was to give special training to young men who desired to become registered pharmacists and who could not otherwise cope successfully with the examinations.

Mr. Morgan states that the venture has been a paying one, but the only pupil of the school to be examined by the board met with failure.

### Western Winnowings.

The young druggists of Detroit held a well attended banquet last week.

Frank Kespler recently opened the Germantown drug store, Germantown, Ill.

Frederick Stearns is giving a series of lectures on his experiences in Europe and Asia.

Dr. Williams, of Bower Mill, Mo., has sold his stock of drugs to P. M. Jewett of Plew.

Dr. J. C. Harper's drug store at Milan, Mich., was burned recently. Loss on stock, \$300.

Dr. Campbell has moved to Rich Hill from Shobe, Mich., and anticipates erecting a drug store.

H. O. Flemming, the Windsor, Ont., druggist, has moved into the new Fleming Building.

G. J. Rhoder, of Darlington, Ind., has sold his stock of drugs to F. W. Campbell and S. G. Keasby.

Ed. Hunt has resigned his position in C. A. Hunt's drug store, Urbana, Ind., and will go to Chicago where he will be employed.

The glass, paint and oil house of Jones & Ainsworth, Lincoln, Neb., will soon be increased in capital stock and the company will be incorporated under a new name.

The drug and grocery store of L. J. Fowler, of Lincoln, Neb., was entered by burglars recently and a large quantity of groceries and patent medicines were spirited away.

Dennis P. Bogue, of Detroit, has removed his stock of drugs from 41 Michigan avenue to 94 Michigan avenue. The block has just been completed, and Mr. Bogue has one of the finest stores in the city.

Fire recently destroyed the business portion of Oscoda, Mich. H. C. King's drug store was burned; loss, \$2,000; partially insured. Charles V. Hicks' drug store was partially burned, but the stock was saved.

James Reed, of Nebraska City, Neb., one of the oldest druggists in the State and treasurer of the Nebraska State Pharmaceutical Association, made an assignment to M. Davis recently. Mr. Davis was a former partner of Reed's. His indebtedness will reach \$20,000. Outside deals and the financial stringency are said to be the primary causes of his assignment.

A plot was discovered some two weeks since to burn Frederick Stearns laboratory at Detroit just in time to save the concern from destruction. Two men were overheard planning the scheme. They gained an entrance through the rear, and started a blaze. The watchman fired several shots at them, and then turned in an alarm. The firm will offer a reward for the miscreants.

William D. Grote, of the wholesale drug firm of Frank C. Grote & Bros., Cincinnati, was recently united in marriage to Miss Mary J. Maguire, the talented daughter of Joseph Maguire and granddaughter of Honorable Joseph P. Carbery. After a pleasant trip to Boston, New York and the World's Fair, they have settled

down in their elegant home in Cincinnati. Their many friends wish them much joy.

## CORRESPONDENCE.

### Formulas.

To the Editor AMERICAN DRUGGIST:

The publishing of formulas in pharmaceutical journals is a feature of no mean value, and when pharmacists contribute such as are of merit it is an undertaking entitled to due praise and credit. If I to-day allow myself to criticise several which were published in the November 23 number of the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD by Elbert E. Fisher it is not done in a spirit to counteract such efforts, but solely to draw attention to a few ideas which it has frequently occurred to me should be considered when ready-made medicines are put up for sale.

In the first instance, this is the omission of all dangerous medicines from their formulas; the next is to simplify the same, and last, but not least, to have no misleading titles attached to the preparations to be launched upon the confiding customer.

Chlorodyne or pulmonic syrup, after Mr. Fisher's formula, if the dose is a tablespoonful for an adult, contains a full dose as ordinarily prescribed by physicians of tincture of cannabis indica besides the small doses of morphine and chloroform. But supposing the dose to be a teaspoonful only, there still lurks that danger, in such a 3 ounce bottle, of the patient misusing the medicine, for even very small doses of opiates and narcotics invite the habit of chronic use.

In the linseed oil cough mixture of the author we again meet chloral hydrate, hydrocyanic acid and morphine. Originality can hardly be claimed for this formula for it is very similar to Prof. Thomson's formula which reads:

|                       |            |
|-----------------------|------------|
| Ol. lini.....         | ℥. ʒ ii    |
| Pulv. acacia.....     | ʒ iss      |
| Syrup. tolu.....      | ʒ i        |
| Chloral hydrate.....  | ʒ iss      |
| Acid hydrocyanic..... | gtt. xii   |
| Aqua cinnamon.....    | q. s. ʒ vi |

A good working formula, however, is the Cherry Cough Syrup, if the opium is omitted. It seems to me, in devising the above formulas, that the only point kept in view has been the dollars and cents, to the detriment of professional ethics.

The so-called cod liver oil preparations containing only one of the active constituents of cod liver oil should, I think, more properly be titled "Preparations of Gad-uol," the title as it stands now making the buyer believe he gets something which he in reality does not get.

The Boston formula for wine of coca, which the author states is thought so highly of, is more like the feather of the rooster, and no doubt the author's statement is perfectly true, that it is highly esteemed in some quarters, for it contains beside port and claret enough alcohol to make it desirable to some people.

A criticism is always in order, and if I disagree with Mr. Fisher in some points I hope it will not deter him in the future from giving us his experience, for such contributions as his always prove valuable even if we criticise them.

FERD LASCAR,

NEW YORK CITY.

**American Chemical Society.**

Elaborate preparations are being made by the members of the American Chemical Society for its annual meeting, which will be held in Baltimore, Md., on Wednesday, December 27. Hotel Rennerd, the leading hotel of that city, has been selected as the headquarters for the society. This hotel is conducted on the European plan, and the cost of rooms varies from \$1.50 to \$2.50 per day. Prof. Remsen has placed his lecture room at the John Hopkins University at the disposal of the society, and promised to procure larger quarters if that should become necessary.

The Baltimore & Ohio Railroad have offered to give the society excursion tickets from all prominent points on their routes for two-thirds of the usual rates. The committee hope to secure the same reduction on the Pennsylvania.

Eight or ten papers have already been offered, and many more probably will be in the next few days. Much enthusiasm has been evinced by the chemists in Baltimore and Washington, and it is expected that this will be the most successful meeting which the society has ever held.

**BOARDS AND COLLEGES.**

**NEW YORK CITY BOARD.**—At the examination held on December 11 the following applicants passed: Gust. H. Ankerson and Wm. J. Heebner. During the month 23 pharmacists were registered. During the last month the following were convicted and fined for violation of the pharmacy law: Fred. J. Stock, John O'Connor, Fred. Kleinschmidt, Geo. Rosenson and Wm. T. Cox. The next examination will be on January 8, 1894, at 9 A.M., at the college building. For further information address Dr. Wm. Balser, secretary, 218 E. Thirteenth street, City.

**PHILADELPHIA COLLEGE.**—The regular pharmaceutical meeting was held on Tuesday, December 19, at 3 P.M. These meetings have constantly increased in interest, the previous one being especially worthy of note. The programme presented included papers on the following topics: The Columbian Exposition from a Botanical Standpoint, by Henry Kraemer, Ph.G.; Forestry at the Columbian Exposition, with Specimens, by Joseph Crawford, Ph.G.; A Note on Resin Podophyllum, by George M. Beringer, Ph.G.; A New Tablet Machine was also shown by Alfred Leggoe.

The affair was in charge of the following committee: Wallace Procter, Clement B. Lowe, Joseph W. England, William L. Cliffe and Henry Trimble.

**ILLINOIS BOARD OF PHARMACY.**—At the practical examination held in Chicago, Nov. 21 and 22, the following passed a satisfactory examination as licentiates in pharmacy, and were registered as registered pharmacists by examination. A. A. Andres, A. C. Cole, F. H. Hildebrandt, E. A. H. Ladish, C. E. Perkins, A. Rosenwald, J. B. Sutton of Chicago, and D. W. Rockwell, Jerseyville. The following passed a satisfactory examination as assistant pharmacists and were so registered. H. W. Brown, L. A. Bussee, R. H. Butler, F. W. Dudley, J. T. Edward, J. H. Greves, C. J. Hahnegger, J. Hooper, F. W. Keuper, W. T. Liddell, A. A. Moskiewicz, A. J. Seyster, R. J. Trethewey, E. J. Weeks, C. F. Worm, of Chicago; W. A.

Dixon, Decatur; O. P. Morse, Rogers Park; H. H. Vanatter, Joliet; and G. W. Wagner, Oak Park. Twelve failed to pass a satisfactory examination. The next meeting of the board of examination will be held at Springfield January 9, 1894, in room 3, State House. The second meeting of the board for examination and other business, will be held February 13, 1894, at 9 o'clock A.M., at No. 173 39th street, Chicago. For further details address Frank Fleury, secretary, Springfield, Ill.

The **GEORGIA BOARD** of Pharmacy met in the capitol in Atlanta, November 27, as reported last week. The board determined to offer as a special prize a membership in the American Pharmaceutical Association to the candidate who should pass the best examination during the year. Any pharmacist can compete for the prize even though he be already licensed, provided he has not been before the board more than twice. The object of the prize is to encourage further study among the licentiates. Dr. Kendrick's amendment to the pharmacy law has been signed by the governor. This amendment restores the old fee and does away with the annual renewal fees. Fully 95 per cent. of the druggists in the State favored it, as renewing each year has become a burden. An act to put druggists' bills against an estate on the same footing with the physician's has passed the House, and the Georgia druggist is in a fair way to be recognized in law as a preferred creditor.

**A Capsule Trust.**

A trust has been formed by the pooling of the interests of the Detroit firms doing a large business in empty gelatine capsules. This fact has not yet been made public and is even denied in certain quarters, but is nevertheless true. The firms composing the new trust are the Michigan Capsule Co., the Warren Capsule Co., the Merz Capsule Co., and the National Capsule Co., of Indianapolis.

The first intimation of this move that many of the trade had was the reception of a personal letter from some member of the Trust quietly announcing an advance varying in the individual cases from fifty to sixty per cent. In large lots jobbers have been able to buy capsules heretofore at from \$5 to \$5.75 per gross, with buyers' name on boxes if desired. The Trust has raised the price to \$8 to \$8.50, as to make and quantity. It will be seen, therefore, that the jobbers and the drug trade generally are to furnish a rich harvest for the Capsule Trust. In some of the letters sent out it was intimated that a basis of \$7.50 might possibly be settled on for the year 1894, and as a consequence there has been a sudden cessation in the purchasing of stocks of capsules.

The New York capsule makers, Messrs. Planten & Son and Dundas Dick & Co., have not become a party to the trust.

A representative of this journal called upon Messrs. H. Planten & Son, of 224 William street, this city, and in response to a question as to whether the firm was interested in the combination Mr. H. R. Planten stated that they were not interested in the move in any manner. That they had never believed in combinations of any kind to bring about artificial advances in prices. He said that his firm had always maintained a uniform high standard

in the quality of their goods and had depended more upon the high quality than upon the low price of their capsules to sell them.

Messrs. Dundas Dick & Co. take practically the same view of the matter as do Planten & Son. Having established a reputation for their goods they make a uniformly high grade, which they send out under their own name.

**OBITUARY.**

Frank F. Smith, of Richmond, Ind., died on December 8, aged 29 years. Mr. Smith was born in Fort Plain and received his education in Liberal Institute, and graduated from the College of Pharmacy at Philadelphia. At the latter place he followed the drug business for some time, and then moved to Richmond, where he was engaged with Luken & Co. for more than a year, and then decided to go West for the benefit of his health. He stayed one year in Denver. From there he went to California and derived some benefit from his Western trip, and went back east and soon began to complain; returning to Richmond some seven weeks ago he was taken ill with the grip, pneumonia setting in, which ended his life.

Henry L. Fuller, a well known and respected druggist, of Lynn, Mass., died on December 4, of Bright's disease, at his residence No. 49 Church street, aged 72 years. He had been ill for a period of nearly two years, but was only confined to his bed for four days previous to his death. Mr. Fuller was born in Hartford, Conn., and learned the drug business when a young man. He went to Lynn some 20 years' since, before which he had been in Hyde Park for a number of years. Since moving to Lynn he has been continuously engaged in business as a pharmacist at 104 Market street. He leaves a widow and three children.

William Stewart, Jr., twenty-six years old, a prescription clerk with the Hegeman Drug Corporation, 196 Broadway, while on his way to lunch last Wednesday stopped to see his father who is employed by Hudson & Co., in the old Herald building, and walking through the open door of the elevator shaft, in the belief that the car was at that floor, fell two stories and was instantly killed. He leaves a widow and two children at 342 Keap street, Brooklyn.

William Shoenheit, who had been managing a drug store at Holton, Kansas, took sick recently and his mother removed him to Falls City, Neb., where his sickness developed into typhoid fever, and after a ten days' illness death ensued. His untimely death is a sad ending of the bright and promising career of a young man of more than ordinary ability, who was highly esteemed by all his numerous friends and associates.

Cooper Smith, of Cooper Smith & Co., Philadelphia, dyestuff and chemical merchants, died on Saturday, December 9, of gastric troubles, after an illness extending over three months. He was in his 54th year, and was highly esteemed by the trade of Philadelphia and this city.

Ben. Agden, of the firm of S. G. Wright & Co., Elk Creek, Neb., died on the third instant. He was a member of the K. of P. and carried \$3,000 insurance in different orders.

## An Advertising Suggestion.

## Returning Cottagers'

## Note Book.

1. Spices for Pickles at Hay's Pharmacy.
2. Paint and Brush in Hay's Paint Department.
3. Johnnie's gargle in Hay's Prescription Department.
4. Potash for soap at Hay's Pharmacy.
5. Carriage Sponge at Hay's.
6. Materials to finish up photos.
7. Hot water bottles at Hay's Pharmacy.
8. A box of those Key West Cigars at Hay's cigar counter.
9. Drink an orange phosphate at Hay's soda counter.
10. Pay that June bill at Hay's.

—From *Printers' Ink*.

Good's carbolio soap is good carbolio soap. That is the only kind it pays to sell. Write Jas. Good, Philadelphia, mentioning this paper, and get his list of soaps with special discount sheet.

Fine trade wants fine goods, and nothing is finer in their line than the English dressed chamois-skins carried in stock by the Philadelphia Truss Co., 610 Locust street, Philadelphia. These skins are just the things to suit for making chamois vests. Write them for quotations and sizes, mentioning this journal.

## No Clams in Europe.

A 50 cent bottle of Burnham's Clam Bouillon sells in England at 5s. 6d., or 87c., yet in one year's time the sales have increased over 500 per cent. There are no clams in Europe; these are strictly an American product, but the English know a good thing and like it. The sales of your hot soda can be largely increased by putting up a little "Burnham's Clam Bouillon."

## Cold Weather and Hot Water.

At a little gathering at the New York Press Club the other night Chas. J. Smith, the founder and for many years managing editor of the old New York *Star* told of a little invention of his to prolong life, which he called the "universal hot water comforter" and which he proposed to have the life insurance companies furnish gratis to their largest policy holders.

The invention consists in a modification of the ordinary hot water bottle by means of attaching a tube with a mouthpiece to it.

On retiring of a cold night the bottle is filled with hot water in the usual way, and there is also added a suitable proportion of sugar, lemon and whisky. The patient reposing on his back places the bottle on his chest and the tube in his mouth, the result being a most comforting one. Having tried it experimentally on a friend, whom he met next day, the friend assured him that even on waking next morning a certain amount of comfort could be extracted by a little judicious manipulation. Any one desirous of experimenting in this line will find an apparatus ready to hand in the Tyrian combination fountain and hot water bottle, an illustrated description of which can be obtained by addressing the Tyler Rubber Co., Andover, Mass.

## "I Have Found It."

Dr. L. M. Roberts, of Little Falls, Minn., writes October 31, 1893, to Jerome Kidder Manufacturing Co., 820 Broadway, New York: "Dear Sirs: Instructions came to hand. Well, I will say that after 12 years of searching all the shops of the various manufacturers—after trying a half dozen different makes for year—after seeing foreign exhibits—I have but one word to apply to this new coil you have sent me—"Eureka" (which word translated means "I have found it"). So far as I have been able yet to test it, it is a revelation in mechanics and therapeutic range—it is a "Unicum." Adjectives fail me in my effort to express my appreciation of it—how puny and ridiculous my erstwhile finely appointed apparatus looks by side of it; and best of all is its simplicity—multiform are its coils and appointments, yet as simple to operate as a one coil, household coil; and that "Rheostat is a great thing—nothing like it in any other electrical apparatus I ever saw, gives instant, absolute control of any current, and so finely increased or diminished that a child cannot complain.

## Standard Glass Ware.

The Standard Flint Glass Works of Philadelphia, Pa., desire to call attention to the fact that in supplying the jobbing and wholesale trade only with homoeopathic, screwcap and other vials, glass syringes, etc., they do not enter into competition with their retail trade. Their "Standard" vials for quality and superiority of workmanship stand second to none in the market, and prices are the lowest consistent with superiority of goods. Their advertisements in our pages show a new puzzle which is meeting with large sales for the holiday trade. Write them for same, mentioning this paper.

## Columbian Souvenir Free.

Write to the Jerome Kidder Manufacturing Co., 820 Broadway, mentioning THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD, and you can obtain free a "Columbian Year Souvenir."

## Notes on Prices.

## QUININE PRICES.

The Roessler & Hasslacher Chemical Co. in their circular dated at 73 Pine street, New York, December 16, 1893, say: We beg to inform you that on cable advice we have advanced the price of our Gold and Silver brand sulphate of quinine, and now hold for prompt delivery, and for contracts extending over sixty days, as follows: In 100 oz. tins to 22½c. per oz.; 50 oz. tins to 23c. per oz.; 25 oz. tins to 23½c. per oz.; 5 oz. tins to 24½c. per oz.; 1 oz. tins to 27½c. per oz., and in 1 oz. vials to 29½c. per oz.

Terms f. o. b. New York, net 30 days, less 1 per cent. for cash with 10 days.

The New York Quinine & Chemical Works advanced their prices on December 18 for "N. Y. Q." sulphate and bi-sulphate quinine, and quote: 1 ounce vials at 29½c. per oz.; 1 oz. tins at 27½c. per oz.; 5 oz. tins at 24½c. per oz.; 25 oz. tins at 23½c. per oz.; 50 oz. tins at 23c. per oz.; 100 oz. tins at 22½c. per oz.

## New York City Prices.

W. H. Raser, drug broker, of 32 Platt street, New York City, says in his circular letter dated December 13 that there is not much doing in large lines of package goods, but a very good jobbing trade is doing, considering that we are so near the end of the year. Opium has been rather active for some days past, and prices have been moving upward notwithstanding the skepticism of some operators as to any sufficient grounds existing to cause a permanent advance at this time. A week ago there were reported one or two sales as low as \$2.05 cash, but at the close of the week sales had been made at \$2.10 and subsequently \$2.12½. To-day there is nothing available under \$2.15 for one case or more, with up to \$2.20 asked and one large holder standing out for a \$2.25 market. Powdered opium is still available at \$2.95 to \$3, but more is now being asked by some. Quinine is in active demand, both for domestic and foreign and outside holdings have been pretty well cleaned up. Such outside lots as have not been sold are withdrawn for a higher market and there is no foreign bulk here available at this time below manufacturers' price of 20c. It is said that some makers have advanced their price in Europe to 11d. (= 22c.), but as yet there has been no change in schedule prices here for either foreign or domestic. Oxalic acid has advanced to 6¼@6½c. Acid tartaric, powdered, single barrels at 22½c., 5 barrels at 22¼c. Camphor, Japan, refined, in 1 oz. cakes, 200 lb. cases at 45c. f. o. b. Shellacs are firmer. Cocaine declined but coca leaves advanced here. Linseed oil higher. Cod liver oil firm at recent advances with a higher tendency. Malaga olive oils, yellow and green, are unchanged. Bank and Straits oils are lower. Cotton seed oils have further declined. Sugar lead, white, single casks at 10¾c., 5 casks at 10½c. Castor fiber scarce at \$20 to \$22. Oils anise and cassia higher. Peppermint further advanced. Lemon, bergamot, clove, cubeb, wintergreen, sassafras, etc., unchanged. American saffron has further advanced. Valencia and Alicante saffron are lower. Balsam copaiba higher. Ipecac has advanced. Jalap is lower. Senega is lower. Serpentina is higher. Canary seed is firmer. Hemp seed is easier. Flax seed is higher. Mustard seed, California, owing to recent large arrivals, prices are lower. Cut althea is scarce and higher. Chlorate of potash is firmer. Potash first sorts obtainable at 4¼c. Yellow prussiate potash has advanced but can still buy from second hands at 23 to 23½c., or about 1½c. under manufacturers' present prices. Sal soda is lower. Spices, little change to note.

## Review of the Wholesale Market.

NEW YORK, December 20, 1893.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

The market during the week has been very much of the same character as for the past month, namely, the orders are light in size and comparatively frequent in number. The bulk of the business transacted has been of a jobbing character. Such fluctuations as have occurred have for the most part been merely further changes in the directions already indicated by the previous course of the market. The principal interest of the week is in the general advance of quinine, which has been

brought about partly by the increased demand incident to the spread of the grip, but mainly by the advance of about 15 per cent. in the prices paid for bark at the sales in Amsterdam. The interest in opium has declined somewhat during the week.

## ADVANCED.

Quinine.  
Balsam fir, Canada.  
Sodium hyposulphite.  
Oxalic acid.  
Gum chicle.

## DECLINED.

Cubeb berries.  
Copperas.  
Oil of cubeb.  
Oil of lemon.  
Senega.

## DRUGS.

**BALSAMS.**—Copaiba has attracted considerable attention during the interval by season of the active inquiry and small supply, though no transactions of any size are reported. Central American is quoted at 34c. 7 bbls. of Para are to hand unsold. Fir, both Canada and Oregon, have been advanced to \$3.50 and 80 @ 85c. respectively and are held firm. Importers are bare of tolu and jobbers demand 26 @ 27c.

**BEANS, vanilla,** are jobbing with seasonal activity and firm at previous range.

**BERRIES, Cubeb,** are dull and easy with sales of XX at 19½c. No offers of juniper berries are being made and stocks are held firmly 2¼ @ 3c.

**CASTOR FIBER** is in very limited supply and firmly held at \$20 @ \$22.

**CANTHARIDES, Russian,** have been sold at 72½c. but little business is doing.

**CUTTLE BONE** is jobbing in a fairly satisfactory manner at 10 @ 10½c. for Bari and 11 @ 11½c. for Trieste.

**MANNA** is somewhat easier and dull at 85c. for large flake, 35c. for small and 27c. for sorts.

**MENTHOL** continues very firm at \$4.50 and in limited supply.

**LEAVES**—German Wormwood have sold at 6½c. in a jobbing way. Buchu, short, have sold at 12c. for ordinary in thousand pound lots. Marjoram is active and firm at about 12½c. Sennas are in moderately active demand at steady prices.

**OPIMUM.**—The interest noted in our last issue has fallen off considerably during the last week; although most of the advices from abroad indicate an advance this market has not followed very closely the indications from London and Smyrna. Purchases of case lots can be made spot at \$2.20 @ \$2.25, in a jobbing way \$2.25 and \$2.30 is asked, and for powdered \$3.00 @ \$3.10 is asked.

**QUININE.**—As intimated in our last the quinine market in Europe has been decidedly active and this activity has continued throughout the week. Cables continued to give advices of considerable sales and a good deal of excitement, and in the latter part of the week a general advance was made by dealers both foreign and domestic. The foreign manufacturers advancing their price 2½c. and the domestic makers 3c. per ounce. Outside holders have followed suit, but are still somewhat below the manufacturers' quoting 22c. for large bulk against 22½c., the price set by European makers. Manufacturers agree to take contracts at the advanced rate covering 60 days, giving protection against a decline.

## DYESTUFFS.

**CUTCH** is in strong position at 4¼ @ 5c. wanted for SM. Ex-the Glenfalus due this month SM can be had at 4¼c., though no samples are yet shown of the lot and no business reported.

**DRUGS, Nutgalls, Indigo and Madder** all remain quiet and dull.

**GAMBER** sales ex-Hiddekel opened strong at 4 @ 4 1-16c., but weakened to 3.90 @

3.95c. with a view to hurrying up the discharge of vessel. Ex-store 4 @ 4½c. is demanded.

**SUMAC, Sicily,** is still in demand and is scarce on the spot at \$80. The quotations to arrive are \$75 @ \$80. Virginia are firm but not active.

## CHEMICALS.

**ACETANILID** is selling well at 34 @ 35c. bulk.

**ARSENIC, white,** is in light supply and firm at 3½ @ 3½c.

**ALUM** shows a fair distributive demand at \$1.75 for lump and \$1.80 for ground.

**BLUE VITRIOL** finds some sale in Europe and in consequence holders here are firm at 3½c.

**CHLORATE OF POTASH** has attracted some attention and it is about time that business was closed up for the next year. The New York agents of the Union, however, are not quoting figures to cover '94 delivery. The price on the spot is 14½ for German, 14¼ for English with no demand.

**BLEACH** is quiet at unchanged prices.

**BRIMSTONE** is in limited supply on the spot and for January-April shipments contract could probably be placed at \$16.87½ to \$17.00 for best seconds.

**CREAM TARTAR and Tartaric Acid** are dull and featureless.

**COPPERAS** is being freely offered from the West down as low as 50 @ 55c. in carloads, or 75 @ 80c. in a jobbing way.

**HYPOSULPHITE OF SODA** has been advanced to \$1.75 per one hundred pounds in casks and \$1.50 in kegs.

**OXALIC ACID** is in demand and 6½c. is the ruling quotation. Certain brands of foreign are quoted at 7c.

**QUICKSILVER** is jobbing at 51 @ 52c.

## ESSENTIAL OILS.

**CUBEB** is dull and weak at \$1.85 @ \$1.90.

**CLOVE** sells in jobbing lots at 50 @ 52½c.

**LEMON** is dull and easy at \$1.60 for choice brands, and inferior obtainable down to 95c.

**PEPPERMINT** is dull the high prices of holders here having shut off the European demand. Holders claim, however, that the statistical position of the crop warrants their views and are firm at \$2.45 @ \$2.50 for Western bulk and \$2.50 @ \$2.65 for Wayne Co. bulk. For HGH \$3 @ \$3.10 is wanted.

**SASSAFRAS** has been coming in in small lots and selling at 40c.; as is usual there are charges of adulteration as it can be bought from second hands at 36c.

## GUMS.

**ASAFETIDA** is firm and good qualities are scarce.

**CHICLE** has eased off somewhat and again become firmer most holders now quoting 30c. as inside price for large lots.

**SHELLAC.** But little demand is noted and the market is dull.

**Mucilaginous gums** are quiet and unchanged in price.

## ROOTS.

**GOLDEN SEAL** is quite firm and the spot supply is small; 22c. is the quotation for the limited stock available. Advices from the interior indicate a very firm position.

**IPERCAC** is jobbing at \$1.25 @ \$1.50. Gentian has sold in round lots at 3¼c., but little business is reported.

**JALAP** jobs slowly at 25 @ 30c.

**SENEGA** has weakened under the lack of inquiry and is now quoted at 39c. for Manitoba and 40c. for Minnesota. One thousand pound lot is reported sold on private terms.

**TEXAS SNAKE** is in very light supply and quoted firm at 30c.

## SEEDS.

**ANISE, Star,** is cabled higher from abroad, the market here being firm at 19c.

**CANARY** is in fair demand in a jobbing way and held firm at 2½c. Inside for Smyrna and 3c. for Sicily.

**CARAWAY, Dutch,** is firm at 6½ @ 6½c. **CELERY** is selling in a small way at 16½ @ 17c.

**HEMP, Russian,** jobs at 2½c., though 2½c. would be accepted for large lots.

**MUSTARD, California yellow,** is in fair demand and very firm at 4c. For brown 3½c. is asked. Quotations from the Pacific coast for forward delivery are about on a parity with these figures.

**POPPY** is held at 6½c. for German and 6½ @ 7c. for Dutch, the latter being scarce.

**RAPE, German,** is jobbing 6½ @ 7c.

## Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted one time free; for each additional insertion Fifty Cents. Write distinctly, on one side of paper only, and do not use postal cards.*

## POSITIONS WANTED.

**DRUG CLERK, New York State** licentiate, twenty years' experience city and country; temperate, competent, good business qualifications and good habits, desires permanent position; low salary; country preferred. Address, for ten days, "Pharmacist," Box 507, Bath, Steuben Co., N. Y.—26.

**REGISTERED PHARMACIST, graduate N. Y. C. Pharmacy;** speaks German and English; will take a position at junior's wages for the Winter. Address "Camphor," at this office.—25.

**DRUG CLERK** wants position; 10 years' experience; licensed and temperate; reference given, E. New, Palmer House, Olean, N. Y.

**WANTED.**—By a graduate in pharmacy a position as head clerk or manager of small establishment in country or city; can manufacture or act as salesman; have a fair knowledge of volumetric analysis. Address "Tolysal," this office.

**SITUATION WANTED** by competent drug clerk 5½ years' experience; graduate P. C. P.; single; moderate salary; go any distance; references. Address D. Parke Custia, Tallahassee, Fla.

**RELIEF CLERK.**—Young man desires position as relief clerk, registered, German and English, for Saturday, Sunday or Monday; highest testimonials. Address "Physostigma," care this office.

## BUSINESS OPPORTUNITIES.

**DRUGGIST, WHITE PLAINS.**—For rent, corner store in new Auditorium Building in which the new Opera House building will be completed December 1; good opportunity for the right man. Apply to L. W. Munroe, White Plains, N. Y.—24.

**DRUGGIST** of large New York city and country experience, desires position as manager or senior clerk in a large town or city, New York State; best references and from present employer. Address "Phenacetine," AMERICAN DRUGGIST.

**FOR SALE** below inventory, old established drug store in Little Falls, N. J.; 60 minutes from New York; stock and fixtures inventory \$1,500; special inducement to cash buyer. Address B. J. Crane, Morristown, N. J.—24.

**FOR SALE.**—Established business; good opportunity for young man with \$1,000 cash; balance (\$500) on easy terms; village in Westchester county, N. Y. For particulars address "Bromoform," this office.

**FOR SALE.**—Best drug business in Northern New Hampshire; no competition; do \$1,200 this year; stock about \$7,500; sell at invoice—\$5,000 cash down; no less. Address A. A. A., Portland, Me.

**WANTED.**—I wish to buy a paying drug business in N. Y. State; one that will inventory between \$3,000 and \$5,000 and will bear the strictest investigation. Address "Sulfonal," 82 Washington street, Binghamton, N. Y.

# ORIGINAL PACKAGE PRICES.

It should be understood that the prices quoted in this column are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a considerable range of prices.

## Drugs, Chemicals, &c.

|   |       |       |
|---|-------|-------|
| Acetanilid, bulk, per lb.               | .34   | .35   |
| " " " " " " " "                         | .35   | .36   |
| Acetate of lime:                        |       |       |
| Brown, per 100 lb.                      | .90   | .95   |
| Gray, per lb.                           | .01   | .01   |
| Acids:                                  |       |       |
| Acetic Com'l pr 100 lb                  | 1.87  | 1.12  |
| Aqua fortis, 36 deg.                    | .03   | .04   |
| " " " " " " " "                         | .03   | .04   |
| Benzoic, German.                        | .47   | .54   |
| " " " " " " " "                         | .09   | .09   |
| Boric, Whole.                           | .13   | .14   |
| " " " " " " " "                         | .13   | .14   |
| Citric, American.                       | .44   | .46   |
| " " " " " " " "                         | .44   | .46   |
| Carbolic Crystals.                      |       |       |
| bulk.                                   | .13   | .17   |
| lb. bottle.                             | .80   | .81   |
| Muriatic, 16 deg.                       | .85   | 1.05  |
| Nitric, 36 degrees.                     | .03   | .04   |
| " " " " " " " "                         | .04   | .04   |
| Oxalic, English.                        | .06   | .07   |
| " " " " " " " "                         | .06   | .07   |
| Picric.                                 | .86   | .86   |
| Salicylic.                              | 1.00  | 1.00  |
| Sulphuric.                              | .70   | .83   |
| Tartaric, Crystals.                     | .85   | .83   |
| " " " " " " " "                         | .85   | .83   |
| Tannic.                                 | 1.05  | 1.00  |
| Alcohol, Grain, per gal.                | 2.24  | 2.28  |
| (Less rebate.)                          |       |       |
| Wood, 95%.                              | 1.00  | 1.05  |
| Alcoholene.                             | .11   | .12   |
| Alum, Lump, per 100 lb.                 | .11   | .15   |
| Ground, per 100 lb.                     | .11   | .10   |
| Antifebrine, per oz.                    | .10   | .10   |
| Antipyrine, per oz.                     | 1.00  | 1.40  |
| Arrow root, Berm.                       | .14   | .15   |
| St. Vincent, in bbl., lb.               | .11   | .11   |
| Arsenic:                                |       |       |
| Red Saxon, lb.                          | .05   | .06   |
| White.                                  | .05   | .06   |
| Balsam, Copaiba, lb.                    | .38   | .40   |
| Fir, Canada, gal.                       | 3.50  | .40   |
| Fir, Oregon, gal.                       | .80   | .85   |
| Pers, lb.                               | 1.15  | 1.50  |
| Tolu, lb.                               | .25   | .27   |
| Bark, Buckthorn, per lb.                | .07   | .09   |
| Cascara Sagrada, lb.                    | .05   | .06   |
| Elm, lb.                                | .10   | .11   |
| Orange peel.                            | .06   | .07   |
| Sassafras, per lb.                      | .06   | .07   |
| Soap, lb.                               | .04   | .04   |
| Sicarb. Soda, Engl. lb.                 | .03   | .03   |
| domestic, lb.                           | .30   | 3.00  |
| Bichromate, Pot'h. lb.                  | .10   | .11   |
| Bismuth, Sub. Nit.                      |       |       |
| per lb., bulk.                          | 1.95  | 2.00  |
| Bismuth, Sub. Carb.                     |       |       |
| per lb., bulk.                          | 2.25  | 2.30  |
| Blanch'g Powd., per lb.                 | .04   | .04   |
| Blue Vitriol, lb.                       | .03   | .04   |
| Borax, refined, lb.                     | .07   | .08   |
| Concentrated, lb.                       | .07   | .08   |
| Brimstone, best ad, ton                 | 19.00 | 19.50 |
| Bromide Potash, Domestic, b'l. lb.      | .37   | .38   |
| bottles, lb.                            | .45   | .46   |
| Bromide Ammonium.                       |       |       |
| bulk.                                   | .45   | .46   |
| Bromide Sodium, b'l.                    | .42   | .43   |
| Bromine, bulk.                          | .43   | .45   |
| Burgundy pitch, per lb.                 | .00   | .00   |
| Cacao Butter:                           |       |       |
| 1-lb. boxes, lb.                        | .33   | .34   |
| Dutch A., per lb.                       | .33   | .34   |
| Caffeine.                               | 1.90  | 2.25  |
| Camphor, red'd, bbls. lb                | .45   | .48   |
| cases, lb.                              | .46   | .48   |
| Cantharides, Chinese, lb.               | .58   | .30   |
| Russian, lb.                            | .70   | .75   |
| Carb. Ammonia.                          |       |       |
| cases, lb.                              | .08   | .08   |
| Cassia Buds, lb.                        | .18   | .19   |
| Castor Oil, cases, lb.                  | .15   | .15   |
| Barrels, lb.                            | .14   | .15   |
| Caustic Soda, 60%, 100 lb.              | 2.80  | 2.87  |
| Caustic Soda, 60%, 100 lb.              | 2.90  | 3.10  |
| Chalk, Engl. Precip.                    |       |       |
| bulk, lb.                               | .04   | .06   |
| Chloral Hydrate Crystals, bulk, per lb. | .85   | 1.10  |
| Hydrate crusta, bulk, per lb.           | .90   | 1.05  |
| Chlorate Pot. Crya., lb.                | .14   | .14   |
| Pow'd, lb.                              | .14   | .15   |
| Chloroform, Bulk, lb.                   | .90   | .95   |
| Chinchonidine, Sulphate of, German, oz. | .00   | .00   |
| Citrate, U. S. P. Iron, lb.             | .30   | .30   |
| Soluble.                                | .35   | .35   |
| Iron and Ammonia, lb.                   | .30   | .30   |
| Iron and quinine.                       | 1.90  | 1.55  |
| Iron and strychnine.                    | 2.00  | 2.05  |
| Phosphate, U. S. P. lb.                 | .37   | .37   |
| Pyrophos, U. S. P., lb.                 | .35   | .35   |
| Pyrophos, Soluble, lb.                  | .35   | .35   |
| Potash, per lb.                         | .40   | .40   |
| Soda, per lb.                           | .40   | .40   |
| Cobalt, pow'd, lb.                      | .30   | .32   |
| Cocaine Murate, per oz.                 | 4.75  | 4.95  |

|                                 |       |       |
|---------------------------------|-------|-------|
| Cocaine, bulk, oz.              | 4.15  | 4.15  |
| Cocaine, eighth.                | 4.65  | 4.65  |
| Cod Liver Oil, Norwegian, bbls. | 19.75 | 25.00 |
| Colocynth:                      |       |       |
| Trieste, lb.                    | .27   | .38   |
| Spanish.                        | .30   | .34   |
| Copperas, per 100 lb.           | .50   | .80   |
| Cr. Tartar, Crystals, lb        | .18   | .18   |
| Powdered, lb.                   | .18   | .18   |
| Cube Berries Z.A., lb.          | .10   | .12   |
| Ordinary, lb.                   | .17   | .18   |
| Cutch, bales, SM, lb.           | .04   | .05   |
| Cutch, boxes lb.                | .09   | .09   |
| Cattle bone, Trieste, lb        | .11   | .11   |
| Jewellers' lb.                  | .35   | .35   |
| Dextrine.                       | .04   | .05   |
| Divi Divi, per ton.             | 50.00 | 60.00 |
| Dragon's B'd, lump, lb          | .10   | .10   |
| In recds, lb.                   | .45   | .50   |
| Epsom Salts, per 100 lb.        | 1.10  | 1.20  |
| Ergot:                          |       |       |
| C'm and Russ'a, lb              | .26   | .30   |
| Spanish, lb.                    | .30   | .32   |
| Ergotine, Domestic.             | .40   | 4.00  |
| German.                         | 4.00  | 4.00  |
| Flowers:                        |       |       |
| Arnica Flowers, per lb          | .10   | .11   |
| Chamomile.                      |       |       |
| German, New, lb.                | .19   | .24   |
| Roman, New.                     | .10   | .18   |
| Roman, lb., old.                | .12   | .20   |
| Lavender Flowers                |       |       |
| Ordinary, per lb.               | .04   | .06   |
| Select, per lb.                 | .15   | .16   |
| Gambier, lb.                    | .04   | .04   |
| Glycerin, bbls, lb.             | .14   | .14   |
| " cases, lb.                    | .14   | .14   |
| Grains, Paradise, lb.           | .06   | .07   |
| Guarana, lb.                    | .95   | 1.00  |
| Gums:                           |       |       |
| Aloes, Barb, lb.                | .06   | .12   |
| " Cape, lb.                     | .05   | .06   |
| " Curacao, lb.                  | .05   | .06   |
| " Socotrine, lb.                | .30   | .40   |
| Arabic 1st picked.              | .47   | .55   |
| " " " "                         | .17   | .17   |
| Arabic, sorts.                  | .17   | .17   |
| Asafoetida, lb.                 | .14   | .15   |
| Chicle, lb.                     | .30   | .35   |
| Gamboge, lb.                    | .50   | .54   |
| Guaiac, lb.                     | .16   | .18   |
| Kino, lb.                       | .75   | 1.00  |
| Mastic, lb.                     | .57   | .67   |
| Myrrh, lb.                      | .80   | .80   |
| Oilbanum, sorts, lb.            | .05   | .06   |
| " tears, lb.                    | .11   | .13   |
| Sandrac, lb.                    | .80   | .30   |
| Senegal, picked, lb.            | .14   | .60   |
| " sorts, lb.                    | .09   | .10   |
| Shellac, DC, lb.                | .34   | .35   |
| " VSO, lb.                      | .31   | .32   |
| " Diam'd l'lb                   | .11   | .17   |
| " SS, lb.                       | .11   | .17   |
| " TN, lb.                       | .11   | .17   |
| " Garnet.                       | .84   | .85   |
| " Bleached, lb                  | .30   | .33   |
| Tragacanth, Aleppo, lb.         | .30   | .56   |
| Harlem Oil.                     | .10   | 2.50  |
| Indigo, lb.                     | .45   | 1.05  |
| Insect Flowers.                 | .19   | .20   |
| Insect Powder, pure, lb.        | .16   | .20   |
| Iodide Potash, bulk, lb.        | .75   | 2.80  |
| " bot's, lb.                    | .83   | 2.88  |
| Islinglass, Am'r'n, lb.         | .47   | .60   |
| Japan, lb.                      | .35   | .35   |
| Juniper Berries, lb.            | .00   | .03   |
| Leaves:                         |       |       |
| Belladonna, per lb.             | .00   | .11   |
| Buchu, short, lb.               | .18   | .24   |
| " long, lb.                     | .25   | .25   |
| Coca, prime, lb.                | .14   | .38   |
| Damiana, lb.                    | .13   | .16   |
| Hyocyanus.                      | .07   | .08   |
| Jaborandi, lb.                  | .40   | .50   |
| Senna Alex nat'l, lb.           | .18   | .25   |
| Senna Alex garbled lb.          | .22   | .27   |
| Senna Tinney, lb.               | .06   | .18   |
| Stramonium.                     | .05   | .08   |
| Licorice, P. & S., lb.          | .24   | .24   |
| Lupulin, German.                | .45   | 1.75  |
| Lycopodium, lb.                 | .58   | .59   |
| Manna, large flake, lb.         | .85   | .90   |
| Small flake, lb.                | .35   | .37   |
| Menthol, Japanese.              | .40   | 4.50  |
| Mercurials:                     |       |       |
| Blue Pill, lb.                  | .32   | .34   |
| Calomel, lb.                    | .71   | .71   |
| Cor. Sublimate, lb.             | .62   | .62   |
| Mercury and Chalk.              | .30   | .30   |
| Ointment, lb.                   | .28   | .30   |
| Red Precipitate, lb.            | .81   | .81   |
| White.                          | .86   | .86   |
| Morphine, bulk, oz.             | 1.00  | 2.05  |
| Eights, oz.                     | 2.25  | 2.30  |
| Moss, Irish, lb.                | .00   | .06   |
| Irish, bleached, lb.            | .13   | .15   |
| Muriate Potash, per 100 lb.     | 1.78  | 1.85  |
| lb.                             | .03   | .03   |
| Naphthaline, flake, per lb.     | .03   | .03   |
| lb.                             | .03   | .03   |
| Naphthaline, Ball, per lb.      | .03   | .04   |

|                                   |      |      |
|-----------------------------------|------|------|
| Nitrate Silver, oz.               | .47  | .48  |
| Nitrate Soda, 100 lb.             | 1.85 | 1.85 |
| Nux Vomica, lb.                   | .03  | .04  |
| Nutgalla, China, per lb.          | .13  | .13  |
| Aleppo, per lb.                   | .14  | .14  |
| Oils, Essential:                  |      |      |
| Anise.                            | 1.40 | 1.45 |
| Almonds, Bitter.                  | .80  | 7.50 |
| " Sweet.                          | .80  | .43  |
| Bay, per lb.                      | 3.50 | 4.00 |
| Bergamot.                         | 1.75 | 2.05 |
| Cajeput, Native.                  | .35  | .45  |
| Camphor.                          | .07  | .08  |
| Cassia.                           | .80  | .85  |
| Citronella, Native.               | .24  | .24  |
| Clove.                            | .50  | .55  |
| Copaiba.                          | .65  | .70  |
| Croton.                           | .75  | .80  |
| Cubeb.                            | 1.85 | 1.90 |
| Ergerone, per lb.                 | 1.45 | 1.50 |
| Geranium Chiris.                  | 4.50 | 7.50 |
| Lavender.                         | 1.80 | 1.85 |
| " Garden.                         | .40  | .40  |
| Lemon, as to brand.               | .95  | 1.05 |
| Lemongrass.                       | .10  | .10  |
| Musk, per lb.                     | 7.00 | 8.00 |
| Myrran.                           | .17  | .19  |
| Neroli.                           | .25  | .28  |
| Nutmeg.                           | 1.75 | 2.75 |
| Orange.                           | 1.40 | 1.05 |
| Origanum.                         | .24  | .24  |
| Penayroyal.                       | 1.00 | 1.10 |
| Peppermint, bulk.                 | 2.45 | 2.60 |
| " HGH.                            | 3.00 | 3.15 |
| Rose.                             | 7.50 | 8.00 |
| Sandalwood.                       | .36  | .40  |
| Sassafras.                        | .15  | .15  |
| Sassafras, Artificial.            | .15  | .15  |
| Spearment.                        | 1.50 | 1.80 |
| Tansy.                            | 2.50 | 3.00 |
| Wintergreen.                      | 1.55 | 1.60 |
| " Artificial.                     | .90  | .95  |
| Wormwood.                         | 2.15 | 2.25 |
| Opium, Natur'l, ca, per lb.       | 2.15 | 2.20 |
| Opium, Ordinary.                  |      |      |
| Jobbing, per lb.                  | 2.17 | 2.20 |
| Opium, Powd., per lb.             | 3.00 | 3.10 |
| Phenacetine, per oz.              | .85  | 1.00 |
| Prussiate Potash, Yellow, per lb. | .22  | .23  |
| Red, per lb.                      | .32  | .42  |
| Quicksilver, flasks, per lb.      | .51  | .52  |
| Quinine:                          |      |      |
| Domestic, bulk, oz.               | .22  | .22  |
| Domestic, oz.                     | .22  | .22  |
| German, bulk.                     | .10  | .10  |
| German, oz.                       | .27  | .27  |
| Roots, Aconite, lb.               | .09  | .14  |
| Althea, cut, lb.                  | .16  | .18  |
| Alkanet, lb.                      | .06  | .07  |
| Arnica, lb.                       | .18  | .13  |
| Belladonna Ger., lb.              | .08  | .12  |
| Blood, lb.                        | .05  | .06  |
| Calamus, lb.                      | .07  | .08  |
| Calamus, bleac'd, lb.             | .11  | .14  |
| Colchicum, per lb.                | .21  | .24  |
| Colombo, lb.                      | .06  | .11  |
| Dandelion, Germ. lb.              | .07  | .08  |
| Dogwood, lb.                      | .08  | .10  |
| Galangal, lb.                     | .04  | .04  |
| Gentian, lb.                      | .03  | .04  |
| Ginseng, lb.                      | 2.50 | 3.25 |
| Ginger, Jamaica, bled., lb.       | .14  | .17  |
| Ginger, Jamaica, unbled., lb.     | .14  | .16  |
| Golden Seal, lb.                  | .10  | .12  |
| Hellebore, powd., lb.             | .07  | .08  |
| Ipecac, lb.                       | 1.25 | 1.45 |
| Jalap, lb.                        | .25  | .30  |
| Kava Kava, lb.                    | .17  | .20  |
| Licorice, select, lb.             | .08  | .15  |
| " P. w'd, lb.                     | .05  | .12  |
| Lovage, lb.                       | .50  | .55  |
| Mandrake, lb.                     | .03  | .04  |
| Orris, Florentine, lb.            | .22  | .25  |
| Orris, Verona.                    | .12  | .15  |
| Pink, lb.                         | .24  | .30  |
| Rhubarb, whole, lb.               | .25  | .30  |
| Sarsaparilla, Hond, lb.           | .28  | .42  |
| Sarsaparilla, Mex., lb.           | .10  | .12  |
| Senega, lb.                       | .30  | .41  |
| Serpentaria, lb.                  | .30  | .35  |
| Valerian, Belgian, lb.            | .07  | .07  |
| " German, lb.                     | .10  | .12  |
| Saffron, Amn., lb.                | .10  | .12  |
| Spanish, Valencia, lb.            | 6.25 | 6.50 |
| Spanish, Alicante, lb.            | .10  | .40  |
| Sal Ammoniac, lump, lb.           | .06  | .06  |
| Do, Granulated, lb.               | .05  | .09  |
| Sal Soda, Eng., 100 lb.           | 1.00 | 1.05 |
| " American.                       | .90  | .95  |
| Saltpeter, crude, per lb.         | .03  | .04  |
| Saltpeter, Refined, per lb.       | .06  | .08  |
| Seeds, Anise, Ital., lb.          | 1.10 | 1.11 |
| Anise, German, lb.                | .06  | .06  |
| Anise, Star, lb.                  | .19  | .23  |
| Canary, Smyrna, lb.               | .03  | .03  |
| Canary, Sicily, lb.               | .03  | .04  |
| Caraway, lb.                      | .06  | .06  |
| Calary, lb.                       | .16  | .17  |

|  |       |       |
|--|-------|-------|
| Seeds, Cardamom, Aleppy, per lb.         | .65   | .75   |
| Cardamom, Malabar, per lb.               | .75   | .85   |
| Colchicum, lb.                           | .11   | .13   |
| Coriander, lb.                           | .05   | .05   |
| Cumin, lb.                               | .11   | .12   |
| Fennel, Germ., lb.                       | .11   | .12   |
| Flax Meal, per lb.                       | .00   | .00   |
| Foenugreek, lb.                          | .00   | .03   |
| Hemp, Russian, lb.                       | .03   | .03   |
| Mustard, yel. Cal. lb.                   | .04   | .04   |
| Mustard, brown, Cal. lb.                 | .03   | .04   |
| Poppy, per lb.                           | .09   | .10   |
| Quince, German, lb.                      | .45   | .50   |
| Rape, German, lb.                        | .03   | .03   |
| Rape, English, lb.                       | .03   | .03   |
| Soap, Castile, Mars, scottled, pure, lb. | .06   | .06   |
| White, lb.                               | .10   | .10   |
| Soda Ash, lb., 48% per 100 lb.           | 1.30  | 1.80  |
| Squilla, white, lb.                      | .04   | .06   |
| Sugar Mill, powd., lb.                   | .10   | .11   |
| Sugar Lead, white, lb.                   | .11   | .11   |
| " Lead, brown, lb.                       | .05   | .06   |
| Sulphate Ammonia, per 100 lb.            | 2.90  | 3.00  |
| Do, Potash, 48% per lb.                  | 1.11  | 1.15  |
| Do, Potash, 90% per lb.                  | 2.20  | 2.25  |
| Sulphur, Roll.                           | .00   | .01   |
| " Flower.                                | .00   | .01   |
| Spirits Nitro, U. S. P.                  | .39   | .40   |
| Spirit Ammonia, Arom.                    | .44   | .45   |
| Sulphuric Ether.                         | .54   | .55   |
| Sumac, Sicily, ton.                      | 47.50 | 49.00 |
| " Virginia.                              | .40   | .45   |
| Tar Barbadoes, gal.                      | .40   | .45   |
| Tin Crystals, bbls, per jar, per lb.     | .15   | .15   |
| Tonka Beans, Angost.                     | .17   | .17   |
| lb.                                      | 1.70  | 1.85  |
| Tonka Beans, Para, lb.                   | .90   | .90   |
| " Angostura.                             | 1.70  | 1.85  |
| Turpentine, Spirits.                     | .30   | .30   |
| Vanilla Beans, lb.                       | 6.00  | 6.00  |
| " cut, lb.                               | 4.75  | 6.00  |
| Venice Turpentine, barrels, lb.          | .18   | .19   |
| Cana, lb.                                | .10   | .10   |
| Wax, Brazil, Veg., lb.                   | .11   | .12   |
| Japan, lb.                               | .08   | .08   |
| Zinc Oxide.                              | .30   | .48   |

## Animal and Vegetable Oils.

|  |         |   |         |
|--|---------|---|---------|
| Linseed, raw, gal.....                       | ...     | Ⓒ | .47     |
| Linseed, boiled, gal.....                    | ...     | Ⓒ | .51     |
| Lard, City, Prime, present make, gal.....    | .72     | Ⓒ | .74     |
| Lard, City, Extra No. 1, gal.....            | ...     | Ⓒ | .53     |
| Lard, City, No. 1, gal.....                  | ...     | Ⓒ | .45     |
| " West, prime, gal.....                      | .70     | Ⓒ | .72     |
| Cotton-seed, C r u d e, off grades, gal..... | .25     | Ⓒ | .27     |
| Cotton-seed, Summer Yellow, prime, gal.....  | .34     | Ⓒ | .35     |
| Cotton-seed, Summer Yellow, off grades.....  | .30     | Ⓒ | .33     |
| Cotton-seed, Winter Yellow, gal.....         | ...     | Ⓒ | ...     |
| Cotton-seed, Prime White, gal.....           | .29     | Ⓒ | .40     |
| Sperm, Crude, gal.....                       | .65     | Ⓒ | .67     |
| Sperm, Natural Spring gal.....               | .66     | Ⓒ | .68     |
| Sperm, Bleached Spring gal.....              | .71     | Ⓒ | .73     |
| Sperm, Natural Winter, gal.....              | .71     | Ⓒ | .73     |
| Sperm, Bleached Winter, gal.....             | .76     | Ⓒ | .78     |
| Whale, Natural Winter, gal.....              | .45     | Ⓒ | ...     |
| Whale, Bleached Winter, gal.....             | .48     | Ⓒ | ...     |
| Whale, Ex. B'ch'd, gal.....                  | .49     | Ⓒ | .50     |
| Menhaden, Crude, Sound, gal.....             | .33     | Ⓒ | .34     |
| Dark, pressed, gal.....                      | .34     | Ⓒ | .35     |
| Light, pressed, gal.....                     | .36     | Ⓒ | .38     |
| Bleached, Winter, gal.....                   | .41     | Ⓒ | .42     |
| Extra Bleached, gal.....                     | .44     | Ⓒ | ..      |
| Tallow, City, prime gal.....                 | .28     | Ⓒ | .30     |
| Coconut, Ceylon, lb.....                     | .05 1/2 | Ⓒ | .05 3/4 |
| Cochin, lb.....                              | ...     | Ⓒ | .05 3/4 |
| Cod, Domestic, gal.....                      | .38     | Ⓒ | .40     |
| Foreign, gal.....                            | .42     | Ⓒ | .45     |
| Red Elaine, gal.....                         | .39     | Ⓒ | .40     |
| Red Saponified, lb.....                      | .05     | Ⓒ | .05 1/4 |
| Bank, gal.....                               | .15     | Ⓒ | ...     |
| Straita, gal.....                            | .36     | Ⓒ | ...     |
| Olive oil for table in tins.....             | 1.30    | Ⓒ | 1.25    |
| Olive, Com'a, bbls, gal.....                 | .57     | Ⓒ | .60     |
| Nutmost, prime, gal.....                     | .60     | Ⓒ | .61     |
| Palm, prime, Lagoa, lb.....                  | .06     | Ⓒ | .05 1/2 |

# American Druggist and Pharmaceutical Record.

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WHOLE No. 279

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### A HAPPY NEW YEAR.

A HAPPY and a prosperous New Year to you, kind reader. And may the acquaintances of a year join the host of life long friends whose friendship covers the full twenty-three years of our existence.

It was a delightful fancy of the old fathers of literature, that of apostrophizing the "kind reader," or the "dear reader." How much more intimate the intercourse between you and ourselves than between the old novelist and his readers. Therefore the phrase "kind reader," or even "dear reader," may not be amiss as between us.

Every week we have come to you bringing the news of the world pharmaceutical. The achievements of science, the vicissitudes of commerce, the launching of new ventures bright and buoyant with hope, the stranding of staunch vessels on the reefs of adversity, and the final breaking up of the overstrained ships, which we chronicle under the heading "Obituary," have all been given place.

We have preached occasionally, too, from our editorial platform the gospel of honesty, of helpfulness, of striving, of doing well the duty that lies nearest. For the most part, our preaching has been by indirection, occasionally lightened by some quip and quaintness, and we hope that our sermons have not put you to sleep, that they may even have pricked you to a keener consciousness of your responsibilities.

We have been helpful commercially to many of you, for many have voiced their appreciation in letters. May we not hope that in some few instances our preaching has been more deeply helpful? We very much hope that you

will not, after recalling the year's intercourse, object if we call you "dear reader," and that you may not take it amiss if in wishing you a prosperous New Year we also venture the hope that you may again read out greetings at the beginning of another year. And so, dear reader, we wish you most heartily a very prosperous and

A HAPPY NEW YEAR.

### SHOULD PHYSICIANS DISPENSE MEDICINE.

THE views taken of this question are as varied as are the minds of men, and generally are dependent upon the immediate personal interests of the person speaking, as he sees those interests. It is not without pleasure, therefore, that we reproduce a broad and liberal statement of the case as made by a physician in the form of an editorial article in the *Medical and Surgical Reporter*. Referring to the query, "Should the practitioner supply his own medicine?" the editor writes as follows:

In reply to this query it must be said that, in the present state of medical affairs, as a general rule, in a vicinity amply supplied with competent pharmacists, the practitioner has no right to compound or to carry drugs to dispense with his own hand to the patient.

Holy Writ says that "the laborer is worthy of his hire." And so is the trained, qualified pharmacist. Pharmacy and medical practice, while a close affinity subsists between them, are separate and independent branches of the healing art.

The physician in a large city, who carries and dispenses medicines, by that act loses caste, he does an injustice to his patient, and appropriates to himself what justly belongs to the druggist who depends largely on prescriptions for his support.

It is alleged that the physician saves the patient the expense of prescriptions and so retains him. But the fact is he fails in both. In very many cases he might as well dose his patients with fragments of chips, pebbles or other inert substances as to give him the stale, petrified tablets which, with time, have lost their potency. His patient has no respect for the preacher-practitioner combination, nor has he any enduring faith in the walking apothecary shop, hence, when he is really seriously ill, he will pay only for the straight article.

"Let the shoemaker stick to his last" is an old and true saying. If we would stop counter-prescribing, the pharmaceutical treatment of gonorrhœa and amenorrhœal (?) troubles, then we must give to the honest pharmacist what justly belongs to him. Pharmacists, as a class, are appreciative, and no physician ever patronized one and was not repaid two-fold. What we have said does not apply to the country practitioner, nor to the use of emergency drugs for night practice.

### THE BRITISH PHARMACOPŒIA TO BE BROADENED IN SCOPE.

IT may be recalled by our readers that, as indicated in the appearing in our columns, in some portions of Canada the United States Pharmacopœia is more generally utilized as a standard than is that of Great Britain. The reports from the Medical Department of the Government of India to the Secretary of State for India show that the British Pharmacopœia is even less suited to the conditions existing there than it is to the uses of the Canadas.

The Secretary of State for India has addressed a communication on this subject to the General Medical Council, which has sole authority to issue and revise the British Pharmacopœia, and also submitted reports from medical authorities in India respecting the operation of the current British Pharmacopœia on the practice of medicine and of pharmacy in that part of the British Empire. The reports alluded to show that certain of the drugs described in the British Pharmacopœia could, in relation to the Indian Empire, be usefully substituted by drugs indigenous to India, and that certain medicinal compounds employed there could be advantageously prepared by altered and amended formulæ. The Medical Council thereupon formally requested the aid of the medical authorities of India and of the English colonies generally to co-operate with the Council toward preparing a pharmacopœia which would be sufficiently wide in its scope to meet the requirements of Great Britain itself and of all its dependencies.

The Committee of the Council on the Pharmacopœia have recommended the preparation of another edition of the work, and further, that the aid of the several medical authorities and of the Pharmaceutical Society be again invited by the Council. The committee also recommend that Professor ATTFIELD be invited to continue his services as reporter and editor. He has long been an advocate of the principle of extending the operation of the pharmacopœia, and the result of this move will, no doubt, be the production of a work of great scientific value and one much broader and better than any of the preceding editions.

### AN IMPORTANT POINT IN LAW.

THE decision rendered by Chief Justice GILFILLAN, of the Supreme Court of Minnesota, in the case of the State against CLARENCE A. ROBINSON, is one of very general interest to pharmacists, as it lays down a precedent on a heretofore indeterminate point.

The case involves the responsibility of a registered pharmacist for sales made by his assistant, not a registered pharmacist, during his absence. The assistant in this case was a person employed to keep the premises in order, and not as a druggist's clerk. The lower court held the druggist liable, but Chief Justice GILFILLAN reverses the decision, and declares that the owner of a drug store is not liable under Laws of 1885, chapter 147, section 12, regulating the practice of pharmacy as amended by Laws of 1891, chapter 104, for a sale by one in his employ not a registered pharmacist or assistant, made without his knowledge or assent.

### CAN DRUGGISTS KEEP LIQUOR IN MASSACHUSETTS WITHOUT A LICENSE?

THIS is a question of vital importance to the pharmacists of Massachusetts, as, owing to the necessary, and in some cases very considerable, use of liquors in medicine legitimately, it would be a decidedly awkward undertaking to carry on a store without keeping liquors. On the other hand the advocates of a strict interpretation of the license law hold that under the local option law no one is permitted either to keep or to sell any liquors in no-license towns. The following legal opinion on the subject will therefore be of interest to our readers in Massachusetts generally:

A druggist can without a license keep liquors and use them in compounding prescriptions and preparing medicines and selling such medicines, but without such license he could not sell liquors even upon a physician's prescription.

The whole question is summed up in the case of *Commonwealth vs. Ramsdell*, 130 Mass., 68, in which an unlicensed druggist was complained of for keeping for sale intoxicating liquors. It was decided in that case that "the keeping without a license of intoxicating liquors only for the purposes of mixing them with other ingredients, according to the prescriptions of physicians, to be used as medicine, and of manufacturing such compounds as are commonly used by druggists for medicinal purposes, is not a violation of the statute." The court said, "The statute forbids the sale, without due authority, of spirituous or intoxicating liquors. Such liquors are frequently used in the preparation of medicines and of articles of food. It is not a reasonable construction to hold that the statute prohibits the sale of every medicine or article of food in the preparation of which liquor is used. In order to determine if the statute applies to a sale, the true test is to inquire whether the article sold is in reality an intoxicating liquor. If it is, the sale is illegal, although it is sold to be used as a medicine, or it is attempted to disguise it under the name of medicines, or it is a mixture of liquor and other ingredients. But if the article sold cannot be used as an intoxicating drink, it is not within the prohibition of the statute, although it contains as one of its ingredients some spirituous liquor. The sale of such an article is not within the mischief intended to be remedied by the statute, nor within the meaning of its language."

And their doctrine was the same in 103 Mass., 452.

PHYSICIANS may not dispense in Pennsylvania unless they have been duly licensed. It was thought that this was clearly apparent from the law, but some physicians thought not. Among these was Dr. R. S. KENNEDY, of Beaver, who was prosecuted by the Pennsylvania Board of Pharmacy for selling drugs and operating a drug store in Beaver without a certificate, and without being duly registered according to law. The defense maintained that as the doctor held a certificate and is registered as a practicing physician he was entitled to sell drugs, the refusal of the Board of Pharmacy to grant him a certificate to the contrary notwithstanding. On the other hand, the prosecution maintained that a doctor's certificate was not a certificate to practice pharmacy. The jury returned a verdict of guilty, as indicted.

EVEN the very rascals themselves are cultured in the shadow of the gilded dome of that State House which marks the center of the Hub of the Universe. Here we have a wily and well informed drug clerk appear before the Massachusetts Board of Pharmacy and pass quite a good examination under the name of a less competent applicant. The pride of the Knickerbocker need not suffer, however, as it was the Island of Manhattan that equipped the rascal for his work.

Inclosed please find check for \$1.50 in payment for one year's subscription to the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD to June, 1894. Your journal is always a welcome visitor and valued friend. With best wishes I am, yours respectfully, *Gilliam J. Kelly, (of Kelly & White), Druggists, Flaviola, Ga.*

(Written for the American Druggist and Pharmaceutical Record.)

## LET US REASON TOGETHER.

BY PROF. OSCAR OLDBERG, PH. D.,

Illinois College of Pharmacy.

I read with much interest in one of your November issues the communication from Mr. William B. Thompson, of Philadelphia, anent my article in the *Apothecary* on Compulsory Pharmaceutical Education. Mr. Thompson says that my "arguments seem to be chiefly directed against the possibility of an adequate pharmaceutical education being attainable in the shops," and adds "ergo the curriculum of the college is the means by which a thoroughly practical knowledge of the art may be secured. This is a view from one standpoint only. Five of the leading teaching institutions of the country have been in existence by average of forty-seven years and now we are told that there are comparatively no educated pharmacists in the shops competent to instruct apprentices. Is this to be accepted as the result of forty-seven years of systematic collegiate instruction? If so, it is not a flattering testimony certainly to the efficiency of that system."

I do not understand how such reflections as these can be called forth by my article, which I submit, had for its sole object a catholic discussion of all the facts and conditions confronting us at this time, in this country, touching pharmaceutical education. I am myself a pharmacist of over thirty years' experience, of which four years were passed in dispensing drug stores in Sweden, and eight years in American dispensing pharmacies, a few years in manufacturing chemical and pharmaceutical preparations, and nearly twenty years as a teacher of pharmaceutical students. I am an American by my own voluntary choice, and very proud am I to have the privilege of being an American. It is, therefore, painful to me to be obliged to conclude that my own profession, in my own country, is in a bad condition; but I cannot escape that conclusion, and therefore, I earnestly wish to do my part in trying to find the cause and the remedy. But my article which Mr. Thompson read, calls attention to the following facts: That ours is almost the only country in which systematic collegiate pharmaceutical education is not compulsory; that a large representative gathering of pharmacists delegated by our pharmaceutical associations, State boards of pharmacy and pharmaceutical colleges, has unanimously declared that such compulsory education is necessary; that we have about 40,000 drug stores, manned by from 100,000 to 150,000 pharmaceutical workers, including clerks and apprentices; that in 1871 Prof. Parrish found pharmaceutical education in this country to be in its infancy; that commercial competition has completely changed the character of the drug business until the purely mercantile side overshadows the professional and technical part of it, and threatens to strangle it; that there is no adequate provision for the preliminary education of those who enter shops to learn the business; that all these conditions combined have contributed to make matters worse instead of better; and that there are abundant evidences of the need of better education in our profession. These are facts which cannot be refuted.

Mr. Thompson speaks of the forty-seven years of systematic collegiate education by five colleges of pharmacy, as if he were unwilling to consider the work of other schools and colleges of pharmacy as being of sufficient value to be mentioned at all. The five colleges he refers to can be no others than those in Philadelphia, New York, Boston, Baltimore and St. Louis. The total number of graduates of these colleges from the beginning to the present time, if all living and in active business, would not be sufficient to instruct the apprentices of ten thousand shops allowing one graduate to each shop. But as all graduates must be at least twenty-one years of age at the time of graduation, and as in all probability their

average period of active service after graduation does not exceed twenty years, since many leave the pursuit of pharmacy to become physicians, manufacturers or merchants, or retire for other reasons, there are probably not more than one-half of the ten thousand still in active service, and the total annual crop of graduates in our pharmaceutical schools and colleges put together does not exceed nine hundred. The colleges are not to blame for having failed to accomplish the impossible, for they cannot compel any persons to attend upon their courses of instruction. Hence, there is no cause for discouragement in the fact that the colleges have not been able to make a good standard of technical training more general. But Mr. Thompson goes on to say, "by common assent among pharmacists no single cause has tended more to lower the status of pharmacy in a scientific aspect than the inseparable business rivalry of the colleges. Beyond the number actually needed and already established to meet the gradual growth and demand of the time, these institutions became enterprises with solely pecuniary interests, and these interests became paramount to every other consideration. Then it was that the true sentiment in regard to pharmaceutical education found expression in a resolution passed by the American Pharmaceutical Association in 1871, declaring "That Colleges of Pharmacy should be controlled by pharmacists" and that "a practical experience in the shop should be a *sine qua non* among the requirements for graduation."

Even if "business rivalry" is inseparable from colleges we cannot do without them. The only colleges of pharmacy in existence in 1871 were those at Philadelphia, New York, Boston, Baltimore, St. Louis and Ann Arbor. There was an institution called the Kansas College of Pharmacy at that time which soon afterwards passed from the scene, and the Louisville, Chicago and Cincinnati colleges of pharmacy had barely begun their work. Which "of these institutions became enterprises with solely pecuniary interests paramount to every other interest?" As all of these colleges existing in 1871, excepting the school of pharmacy of the University of Michigan, were controlled by pharmacists, we cannot avoid the conclusion that Mr. Thompson wishes the reader to believe that the school of pharmacy of the University of Michigan was "these institutions which became enterprises with solely pecuniary interests paramount to every other consideration." Such a charge falls to the ground of its own weight. When the colleges of pharmacy controlled by pharmacists passed the resolution in 1871, for it was in truth they and not the American Pharmaceutical Association that did it, was not their judgment in error?

The imputation of unworthy motives had better be excluded from the whole of this discussion, for *that is the cause* which more than any other has tended to lower the status of the colleges of pharmacy and the character of their rivalry. There are principally four kinds of pharmaceutical schools classed according to their organization and means of support: 1, the colleges controlled exclusively by pharmacists and equipped in some measure by voluntary contributions made by liberal pharmacists, wholesale druggists and manufacturers; 2, schools equipped by endowments from other sources; 3, those supported by State appropriations, and 4, those dependent exclusively upon their receipts from students. *All of them depend upon the receipts from tuition for their current expenses*, and if these receipts should prove insufficient, the deficiency is made up in the same way in which the original plant was established. If any distinction is possible as to which of these classes of schools to place among those established as "enterprises with solely pecuniary interests" the schools supported by State appropriations should certainly be the last to yield to any such temptation if they are ever subjected to it—which reasonable men must doubt.

I do not know of any school or college of pharmacy conducted by any single individual, or by any firm, company or syndicate as a mere business venture, but even if such a school existed who shall say that it could not be one of integrity and be not entitled to confidence and support in proportion to its merits, just as every other institution is? If there are colleges of pharmacy in this country guilty of putting their pecuniary interests above every other consideration, then they must be those in which the cheapest equipment, the cheapest corps of teachers, and the smallest amount of instruction are offered in proportion to the amount of tuition fees exacted. Is Mr. Thompson prepared to discuss the subject on that basis? Can any such discussion ever result in any good? I am sure it cannot. The question is not whether the college is controlled by pharmacists or not, nor whether it is supported by State appropriations, endowments, gifts or fees; it is the quality and quantity of the work done. Which deserves the greater confidence and support, the college that receives much and gives little, the one that receives little and gives much, or the one that does justice to its students while at the same time providing with reasonable care for the preservation of its own efficiency and healthy activity.

But Mr. Thompson continues, "the forcible truth of these assertions [that colleges of pharmacy should be controlled by pharmacists] and that 'a practical experience' in the shop should be a *sine qua non* among the requirements for graduation] yet remains, and it has been repeatedly emphasized by demanding that this term of 'practical experience' shall not be less than four years." These "assertions" may be forcible truths in the opinion of some, but others assert with at least equal confidence that a college of pharmacy may be a good one without being controlled exclusively by pharmacists; and I am free to say that more than one of the very best pharmaceutical schools in this country are such as are not controlled exclusively by pharmacists, and that the poorest of all our pharmaceutical schools are controlled by pharmacists.

These statements are unwelcome and not flattering to our professional pride, but necessity compels me to admit that they are true. As to the absolute necessity of practical experience to the accomplished pharmacist, nobody has ever denied it. How much more just would it not be to tell the whole truth instead of only a part of it. There are several pharmaceutical schools which are as emphatic and firm in their declaration and belief that no pharmacist is ever a competent and trustworthy dispenser until after years of experience in a shop of the right kind, but which deny that it must follow from this that the schools or colleges must assume the responsibility for that experience by making it one of the requirements for graduation. For many years I have been convinced of the correctness of the doctrine that no institution of learning should undertake to certify to anything of which it can have no real knowledge of its own, and that the practice of colleges to certify that their graduates are declared such partly because they have had sufficient experience, is wrong in principle. The colleges of pharmacy controlled by pharmacists do not all demand that the practical experience in the shop "shall not be less than four years," and I am sure that the State boards of pharmacy should attend to that requirement and not the colleges.

We are told that "one notable institution in order to secure a share of the patronage of the older schools [an accusation which would never suggest itself to any one acquainted with the institution] declared its purpose to open a short cut into the realm of pharmaceutical practice and science, and preferred to make better qualified pharmacists under its newer methods, etc., etc." Any one acquainted with the facts may draw his own conclusions:

The notable institution to which Mr. Thompson refers, at the time gave a nine months' course of instruction demanding the whole time and attention of the students, while every other college of pharmacy then in existence gave only a course of six night lectures a week for twenty weeks!! But Mr. Thompson devotes considerable space to the discussion of what he calls the "short cut" and describes as "disjointed theoretical instruction," apparently oblivious of the fact that he has set up a straw man to knock him down again. Why does he persistently ignore the fact that no school ever claimed that college training renders practical training in the shop superfluous?

The notable institution of which Mr. Thompson speaks does not know of any "short cuts" and does not give "disjointed theoretical instruction"; but it has been most notable in that it led the other schools of pharmacy in introducing adequate laboratory courses in pharmaceutical education and in furnishing a number of competent teachers in other schools of pharmacy, including some controlled by pharmacists.

But Mr. Thompson has no faith in laboratory instruction. In a letter to me he says "I have ever been a strenuous advocate of the education of the shop. That the shops are not manned to-day by competent instructors I charge back upon the colleges. I should make the actual practice in the manipulations and operations of pharmacy exclusively the tuition of the shop. I would recognize the college as merely auxiliary to this \*\*\*." *"I would abolish all working laboratories for pharmaceutical practice now existent in colleges and teaching institutions."* Then Mr. Thompson refers to Scheele and Procter as products of shop training. Scheele was a Scheele and Procter a Procter. Shop training in Sweden in Scheele's time and shop training in Philadelphia in Procter's time, and the shop training of the average American drug store of to-day differ widely. Does any one for a moment seriously think that our American drug stores are the most favorable nurseries for the production of scientific men? Be it far from me to belittle the importance of proper shop training for pharmacists! May it also please my brother pharmacists not to belittle college training! Scheele was of course more hindered than helped in his scientific work by his shop work, although the shop work first roused his love of scientific research. He afterwards developed into a Scheele in spite of his shop work, and could he have enjoyed in the beginning of his career, or as a preparation for it, the privileges of laboratory courses under competent teachers, he would have eagerly availed himself of them. But his fame is that of a chemist and not that of a pharmacist.

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**Gelatinous Silver Cyanide.**—This compound was referred to by Stas (*Comp. rend.*, lxxiii., 998) some time ago, but he gave no method for obtaining it. L. K. Frankel now describes how a transparent gelatinous mass, somewhat resembling aluminum hydrate, but of greater consistency, occurred as the result of an experiment in which it was proposed to reduce silver chloride to metallic silver by fusion with potassium cyanide. By a quantitative determination it was shown that the compound formed contained five per cent. less silver than theory required for silver cyanide. It was soluble in ammonium hydrate, reprecipitated from the solution by nitric acid, and did not fuse on heating, but decomposed, leaving a residue of metallic silver. The presence of cyanogen was readily detected, and no chlorine was found. Subsequent attempts to produce the substance have failed (*Chem. News*, lxxviii., 178).—Through *Pharm. Journal*.

(Written for the American Druggist and Pharmaceutical Record.)

## THE PHARMACIST IN THE FAR EAST.

By W. E. S. FALES,

U. S. Vice-Consul, Amoy, China.

The complete differentiation between the physician and the pharmacist which marks both America and England is just beginning to manifest itself in China and the other Oriental lands. On the seaboard and especially in the treaty ports where the influence of the "Foreign Devil" is at its greatest, there is considerable similarity between the East and the West. In such cities as Canton, Amoy, Foochow and Shanghai there are drug stores which would be a credit to Broadway or Michigan avenue. The personnel of these establishments though Chinese has been thoroughly trained in pharmaceutical science, and will compare favorably with the graduates in pharmacy of any American institution. Nearly all read, write and speak English with fluency and correctness. Many of them have been educated by the medical missionaries who are so important a feature in the attempt to Christianize the extreme Orient. Others have spent years as drug clerks or doctors' assistants. Still others have received collegiate instruction in such schools as the Victoria College of Hong Kong or the Anglo-Chinese College of Foochow. A fourth class have had the advantages of study and residence in the great cities of England or of the British colonies. They are careful compounders, and tolerable chemists. They are remarkably orderly and keep both store and prescription department so neat and clean as to set an example to Europeans.

They are so economical in the conduct of business that they are gradually driving the English druggists out of the market. How frugal they are may be seen from the expense of a large store which came under my notice. The premises were leased with an option to purchase at a rental of \$10 a month. There were two clerks at a salary of \$3 and \$4 a month respectively; a porter at \$3.25, a bottle-washer at \$2, and two messengers at \$3 a month each. The firm consisted of three members, of whom two lived upon the premises. They carried a medium-sized stock of goods and usually bought and sold upon a cash basis. They also conducted an aerated water works, which did a large trade.

In the management of their affairs, they added to the cost of their goods a sum equal to what they regarded as the amount of breakage, loss by theft, depreciation by time and weather, insurance and the like, and then added to this from 5 to 15 per cent. for their own profit. Upon this basis they were able to sell carbonic acid water, artificial vichy or kissingen for twenty-two cents per dozen quart bottles; where their British competitors were demanding thirty-four.

Proprietary articles, such as Ayer's sarsaparilla, Collis Brown's chlorodyne, Alcock's plasters, Colgate's toilet soap, Beecham's and Carter's pills, Lanman's Florida water, vaseline, and Barry's trichopherous could be procured upon their counters for less than what the "cut-rate" gentlemen ask in our own land.

In liquors they were satisfied when they received \$3 a dozen for V.H. Holland gin in imperial quarts; \$3.50 a dozen for fair Scotch whisky; \$9 a dozen for five year old Bourbon or rye; \$2 a dozen for best Zinfandel and \$17 per 24 pints of G. H. Mumm's extra dry.

The Chinese pharmacists on the coast follow the example of their European colleagues and carry quite a stock of fancy goods and what we call "notions."

Among these may be mentioned cutlery, confectionery, cigars, tobacco, stationery, small leather articles, syrups, fine groceries, pipes, wedding presents and cheap jewelry. They sell everything upon so close a margin of profit that they interfere seriously with the European retail trade in those articles.

In addition to all the articles of our own *materia medica* they deal in nearly all the leading Chinese drugs and medicines. Among these may be mentioned insect-wax, ginseng, peppermint oil, opium oil, pickled ginger, areca nut, dried spider, almond oil, purified pitch, rice-glucose and soy-decoction.

In the interior of China and in those cities where there are but a handful of western barbarians, such as Chow-Chow-Foo, Chang Cheow and Taiwanfoo, pharmacy is conducted in true Mongolian style, the same as it has been done for fifty centuries. The influence of our science upon the profession has been almost imperceptible and is found in a few preparations, such as morphine pills, quinine, glycerin, Brown's chlorodyne, and vaseline. The pharmacy is usually run in conjunction with some other store, a dry grocer's, for example. It is small, occupying a space scarcely larger than a good-sized closet. It is dark, gloomy and seldom over clean. To a student of Shakespeare it gives the impression of the starved apothecary's shop in Romeo and Juliet. A counter runs the length of the room and against the opposite wall is a rough wooden bench on which sit the customers or the friends and relatives of the proprietor.

The stock in trade consists of about five hundred different articles of all sorts. Of apparatus there is almost nothing. All dry or dried articles, such as roots, barks, leaves, insects and reptiles are sold by weight or number. All wines or cordials are sold by the bottle, and all fine oils, essences and strong medicines by the vial. The patient, nurse or physician, but not the pharmacist, makes the infusion, decoction or filtration, as the case may be. The recipe calls for the raw materials, and gives no directions. These are confided to the patient. Here, for example, is a translated prescription for mild gastralgia, indigestion and the like:

|                         |       |
|-------------------------|-------|
| Peppermint flowers..... | 3 oz. |
| Peppermint leaves.....  | 3 "   |
| American ginseng.....   | 2 "   |
| Cardamom seeds.....     | 1/2 " |
| Dried ginger.....       | 1 "   |
| Pine needles.....       | 3 "   |
| Yulan flowers.....      | 2 "   |
| Bay bark.....           | 2 "   |

It makes a bundle at least 6 x 8 x 8 inches. For curious readers I may add that these are simmered for two hours in two quarts of water with the addition of a quarter pound of sugar, and at the end, of a glass of gin or its Chinese equivalent, *Shan Kii*. The result is a dark brown aromatic, palatable tea, which I can recommend as a capital pick-me-up.

The medicinal wines are another interesting feature of the Celestial drug trade. There are said to be four or five hundred of this class. I have noted over a hundred, and my list is very far from complete. Some of these are very simple, like *Gow Leng*, which is made from millet and is supposed to be a good diuretic. Of the same type are rose wine, tea wine, poppy wine and orange wine.

Of stronger nature and suggesting, if not resembling, Benedictine, is *Woo Ka Peh*, a famous stomachic and tonic. Similar to this are such wines as *Foo Quat Mor Qua*, made from tiger bones and papaya, and corresponding to lime, maltine and wine; *Shee Quok Kung*, used for debility; *Fa Fa*, for colds and coughs, a fair Sudorific, and *San Ben*, which corresponds to our beef, iron and wine, and is made from the genital organs of the tiger, deer and bullock! These preparations are all palatable and range in price from *Woo Ka Peh* at ten cents a bottle to *San Ben* at three dollars.

The apothecary holds a good social position in the East, being regarded as a half professional, half tradesman. He is protected by the law, and enjoys, if possible, more esteem by the public than his transpacific colleague.

# Pharmaceutical Progress.

**Migranin** is a mixture of antipyrin, caffeine and citric acid in certain proportions which has been introduced as a headache remedy (*Pharm. Zeitung*).

**Cristallin** is a solution of pyroxylon in methyl alcohol (*Sem. Med.*) which is preferable to collodion because it evaporates more slowly and leaves a tougher residue when applied to the skin.

**Antirheumatin** is a mixture or combination of salicylic acid, soda and methylene blue. The dose is stated to be 0.01 to 0.06 grammes ( $\frac{1}{6}$  to 1 grain) in pill form every 2 or 3 hours (*Apoth. Zeit.*).

**Resorbin** is a new ointment base somewhat in the nature of a mucilaginous emulsion of a vegetable fat made by a patented process (*Deutsch Med. Zeit.*). It is a yellowish white, and smooth in appearance, and has the property of being most rapidly absorbed by the skin.

**Diiodoform** is a new almost odorless succedaneum for iodoform. It has the formula  $C_2I_4$ , and is, chemically speaking, ethylene diiodide. It is insoluble in water, slightly soluble in alcohol and ether, and is soluble in chloroform, carbon bisulphide, benzene and toluol. It is decomposed by light, assuming a peculiar odor. It is made by treating acetylene biniodide with iodine in excess (*Pharm. Zeit.*).

**Creasote or tar pills** may be made, according to Deiterich, as follows:

|   |            |
|---|------------|
| Burnt magnesia.....                                   | 6 grammes  |
| Glycerin.....   | 2 grammes  |
| Creasote (or tar).....                                | 10 grammes |
| Licorice juice.....                                   | 5 grammes  |
| Powdered licorice, a sufficient quantity to make..... | 100 pills  |

Mix one gramme of the magnesia with the glycerin, add the creasote, and then add the remaining five grammes of magnesia, the licorice juice and the powdered licorice in the order named. Finally roll in powdered coffee or a mixture of powdered coffee and cinnamon.

**For Comedones or Blackheads.**—Dr. H. von Hebra recommends the following method of treatment:

|                  |                 |
|------------------|-----------------|
| 1. Rose Water, { |                 |
| Alcohol, {       | 3 ijs (gms. 10) |
| Glycerine, {     |                 |
| Borax.....       | 3 j½ (gms. 5)   |

Shake before using.

|                     |                 |
|---------------------|-----------------|
| 2. Green soap.....  | 3 j½ (gms. 40)  |
| Spir. lavender..... | 3 ijs (gms. 80) |
| Alcohol.....        | 3 ijs (gms. 80) |

Every morning wash the skin with No. 1, and then rub in No. 2. Then wash off with warm water.

**Tricresol** is the latest product of coal-tar chemistry. It is described (*Pharm. Zeit.*) as follows: It is a water-clear liquid of agreeable creasote-like odor, soluble to about 2.2 to 2.55 per cent. in cold water, neutral in reaction, boiling at 185 to 205° C., with a specific gravity of 1.042 to 1.049 at 20°. It purports to be composed of the three cresols, meta-, para- and ortho-cresol, occurring in coal tar. According to Fraenkel and Gruber a one per cent. solution of tricresol is equal in its disinfectant action to a three per cent. solution of carbolic acid.

**Carbolic acid in full strength** is recommended as an application to surgical wounds, by D. Oscar H. Allis (*Med. Record*). The acid with just sufficient water to liquefy it is applied to the wound direct. The wound turns white, and should then be well washed with previously boiled and cooled water and provision made for drainage. Thus used its action is anæsthetic in character.

**Hydrogen Peroxide from Urine.**—Dr. Richardson finds that hydrogen peroxide is formed when fresh urine is exposed to sunlight and oxygen, and is stable when the liquid has been previously sterilized, although rapidly decomposed when active organisms are present. In decomposing urine it may happen that no peroxide can be detected, even when exposure to light has taken place. In such a case it has yet been formed, however, and subsequently become decomposed, destroying by its decomposition such organisms as existed in the urine. Fresh urine was found to possess antiseptic qualities, after exposure, owing to the formation of hydrogen peroxide, and to the action of the latter compound the sterilization of urine by light is largely, if not entirely, due (*Four. Chem. Soc.*, lxiii., 1109).

**Pharmacopœial Test for Arsenic Criticised.**—John C. Umney communicates the following to the *Pharmaceutical Journal and Transactions*. A modification of Bettendorf's test for the detection of arsenic has been generally adopted in the new edition of the United States Pharmacopœia. The original test is a most useful one, and, as usually applied, consists of the addition of a solution of stannous chloride in hydrochloric acid, but is now modified in the above work by the presence of metallic tin, which in the case of the salts of bismuth and antimony appears to be inadmissible. Under the head of bismuth subcarbonate we read as follows: "If 1 gramme of the salt be ignited in a porcelain crucible, the residue when cold dissolved in 5 Cc. of stannous chloride T. S. (see list of reagents, Bettendorf's test for arsenic), and a small piece of pure tin foil added, no dark coloration or precipitate should be produced within fifteen minutes (limit of arsenic)." If this test be carried out with samples of the salts of bismuth and antimony—the salts and reagents having been previously proved to be free from arsenic—the following reaction takes place: (1) Bismuth salts: The solution darkens immediately on the addition of metallic tin, and a heavy black precipitate rapidly forms. At the end of the prescribed time, if the mixture be well agitated, almost complete precipitation of the bismuth has taken place, so that if the liquid separated by filtration be poured into water, hardly any precipitation of oxysalt occurs. The black precipitate is found to consist wholly of bismuth. (2) Antimony salts: Under the same conditions, the precipitation is not so rapid as in the case of bismuth salts, nor so complete, but a black precipitate is formed, quite masking any indication of arsenic if present. If Bettendorf's reagent be applied, without metallic tin, to a solution of the chlorides of either metal in hydrochloric acid, the minutest quantity of arsenic may be detected. This is essentially the test of the German Pharmacopœia given under subnitrate of bismuth.

**Maize as a Sugar Producer.**—F. L. Stewart gives an account of the results of an investigation concerning the value of Indian corn as a sugar producing plant under new conditions of growth and development. It has been found that from the time sugar first shows itself in the cell sap, during the early growth of maize, until the grain begins to harden, it steadily increases in quantity. Then it suddenly diminishes and, finally, disappears. If, however, the ear of corn be removed promptly, at the critical period, all the energies of the plant become directed to the work of storing up more complex reserve materials in the cells of the stalk, the principal function of which thus becomes the accumulation of sugar. Since it is claimed that the immature grain, cured by the ensilage system, constitutes the best, most nutritive, and most readily preserved form in which it can be utilized for stock feeding, it follows that two valuable crops may be secured from the same plants instead of one only. As regards the sugar yield, it is shown that by adopting the method described, the normal 7 to 8 per cent. of sucrose in the juice, at the period when it is richest, is increased to 13 to 16 per cent., *s.e.*, more than is found in good average samples of either East India or Louisiana sugar cane (*Science*, xxii., 143).

**Crystallized Carbon Silicide.**—H. Moissan has obtained silicide of carbon, CSi, in large crystals, by the aid of his electric furnace. The carbon and silicon were combined by heating them together, in the proportion of their atomic weights, with or without the addition of iron; by reducing silica with carbon; or by direct synthesis of the vapors of the two elements. The crystals sometimes occur as regular hexagons, and are colorless and transparent when no trace of iron is present and the operation is rapidly performed. More frequently, however, they are yellow, and, occasionally, specimens are colored blue like the sapphire. They have a marked action on polarized light, their density is 3.12, and they are sufficiently hard to scratch chrome steel or the ruby. Heated in air, oxygen, or sulphur vapor at 1,000°, they remain unaltered. Chlorine affects them slightly at a temperature of 600°, but more powerfully at about 1,200°. Fused potassium nitrate or chlorate; boiling sulphuric, hydrochloric, or nitric acid; and even aqua regia and a mixture of nitric and hydrofluoric acids, have no effect upon them. The carbon present may be oxidized, however, by repeated combustion with lead chromate, and fused caustic potash at a red heat causes disintegration of the crystals, with formation of potassium carbonate and silicate (*Comp. rend.*, cxvii., 425).—Through *Pharm. Journal*.

**Catha Edulis.**—E. Collin deals with this member of the Celastraceæ, the younger shoots and leaves of which constitute the Arabian drug Kât, Khat, or Cafta, a specimen of which was exhibited at an evening meeting of the Pharmaceutical Society, in February, 1887, by Mr. C. B. Allen, and subsequently examined by Dr. B. H. Paul (*Pharm. Journ.*, [3], xvii., 1,009), who failed to find any caffeine or analogous substance present. The plant appears to be cultivated throughout Arabia with great care. After giving details of the method of cultivation, the microscopical appearance of the epidermis of the leaf and transverse sections of the latter and stem are described and illustrated by Collin. He refers to the fact that Flücker isolated an alkaloid, katine (*Pharm. Journ.*, [3], xviii., 224), from the leaves, and states that the Arabs masticate the latter with avidity, in order to keep them awake throughout the night. The Somalis are said to attribute to the drug a similar effect to that produced by the smoking or chewing of opium. The results of

some physiological and therapeutical observations are quoted as indicating that the drug powerfully excites the nervous system, banishes sleep, restores the physical forces, and sustains muscular activity. Medicinally the leaves are used to make an infusion (5 to 15 sm. per liter), a tincture and an extract (*Four. de Pharm.*, [5], xxviii., 373).

**Humanized Milk.**—Dr. S. Smith, writing to the *British Medical Journal* on this subject, refers to Clague's paper (*Pharm. Journ.*, [3], xxii., 651), and gives the details of a method devised more recently by his brother. According to this, 6½ ozs. of new milk should be placed in a tall and narrow vessel of about 7 ozs. capacity and allowed to stand for twelve hours, after which the cream is removed. The skimmed milk is then heated to 70°–80° F., and 40 minims of essence of rennet added while stirring. After allowing to stand at rest for five minutes, the curd is broken up, and the temperature gradually raised to 150° F., the curd being repeatedly broken up and worked into a mass with a spoon. The whey is next poured off, boiled to destroy the ferment and coagulate the albumin, and filtered while hot through fine flannel previously thoroughly wetted. Bicarbonate of soda, 5 grains, and sugar of milk, 110 grains, are then added to the hot filtrate, after which both the whey and previously removed cream are mixed with 13½ ozs. of new milk, and the mixture is brought to the boiling point. Milk so prepared is said to keep good for forty-eight hours. The skin that forms should be carefully removed immediately before use and the cream that has risen stirred in. Another correspondent in the same number recommends the following formula: "Cream (20 per cent. fat), 1½ ozs.; milk (cow's), 1 oz.; water, 5 ozs.; sugar of milk, 3½ drachms. Steam or boil for fifteen or twenty minutes; when cool add lime water, ½ oz."

**Nitro-Metals.**—P. Sabatier and J. B. Senderens describe a new series of compounds, which they distinguish by the term *métaux nitrés*. These are formed by the direct union of nitrogen peroxide with certain metals, the vapor being passed at a temperature of 25° to 30° over the metals in a finely divided state, as obtained by the recent reduction of their oxides by hydrogen or carbonic oxide. Copper, cobalt, nickel, and iron are the metals so far experimented with. Nitro-copper, Cu<sub>2</sub>NO<sub>3</sub>, is a brown substance which reacts with great energy with water, nitric oxide being evolved. It was found to contain about 74 per cent. of copper. Though unaffected by dry air at the ordinary temperature, it is dissociated when heated in pure nitrogen. By heating some of the compounds in a Faraday V-tube, nitrogen peroxide is liberated and collects in the cold limb in the liquid form, being reabsorbed by the copper when the tube is allowed to cool. Hydrogen only affects the nitro-copper when heated to about 180°, ammonium nitrite and free ammonia being produced. Carbonic oxide reduces the copper to the metallic state on heating; dry ammonia gas reacts in the cold, metallic copper and ammoniated oxide of copper resulting; and sulphuretted hydrogen also reacts without the aid of heat, water and sulphur being liberated, while finally a blue sulphide of copper remains. Nitro-cobalt occurs as a black powder. It reacts violently with water, and, when mixed with a combustible substance, forms a dangerous explosive. Nitro-nickel is also black, and resembles the cobalt compound in its properties, while nitro-iron is more difficult than the others to isolate, and has not yet been obtained in sufficient quantity for detailed examination (*Bull. de la Soc. Chim.* [3], ix., 669).

**Ferment in Capers.**—L. Guignard finds that the existence of special ferment cells is general among the Capparideæ. By their morphological characters in the root and stem they resemble those found in the same organs in the Cruciferae, while, in the leaf and flower of the caper plant (*Capparis spinosa*, L.), they are grouped in a peculiar manner. The reactions of the cell contents are identical with those of myrosin. It is in capers that the ferment cells are most numerous, and the glucoside, of which the decomposition takes place in the same manner as in the Cruciferae, is most abundant. The ferment present exists chiefly in the flower and the pulp of the fruit. The seed, on the other hand, in all the Capparideæ, is relatively poor, both in ferment and glucoside, what is found of the former constituent being in the embryo (*Comp. rend.*, cxvii., 493).

A new variety of galbanum has appeared in the market of late years in considerable quantities, says Ed. Hirschsohn (*Pham. Zeit. fur. Russt.*), which in its soft turpentine-like consistence reminds one of the so-called Persian variety which came into commerce through Nishni Novgorod 25 years ago. In odor and color, however, it more nearly resembles the Levantine resin. Concentrated sulphuric acid dissolves the gum-resin with a yellowish-brown color; when diluted with double its volume of 95 per cent. alcohol the solution turns brown and on addition of water a brown resin separates out. The alcoholic solution (1 to 5) of this galbanum yields a muddy mixture on addition of an equal volume of either concentrated hydrochloric or nitric acid. On distillation with steam 15 per cent. of ethereal oil is obtained of a characteristic galbanum odor. This deflects polarized light to the right. Petroleum ether dissolves from 25.52 to 30.47 per cent. of the resin. The author isolated from the residue of this extraction a crystalline body which he provisionally terms "galbanic acid." Previous examination of other kinds of galbanum failed to reveal any such body, while the proportion of matter insoluble in petroleum ether was much larger. The petroleum ether extract takes on a greenish color with copper acetate solution. The residue turns yellowish-brown when treated with Frohde's reagent, and a pale pink with hydrochloric acid, thus differing in every respect from the kinds formerly examined. Ether dissolves from 43.70 to 46.67 per cent., 95 per cent. alcohol 0.98 to 2.10 per cent., and water 8.04 to 10.83 per cent. The residues in each case show the reactions usual with ordinary galbanum. The author is of opinion that this galbanum is from a different botanical source than the ordinary kind.

#### New Essential Oils.\*

A few oils which have been distilled for the first time, and from material which has been accurately identified botanically, are of special interest and deserving of notice at this time.

**Oil of Dittany.**—(From *Cunila Mariana* L. Nat.-Ord. Labiatae.) The yield of this oil from the dry herb was 0.7 per cent. It is of a yellowish-red color, has a sp. gr. of 0.915 at 15° C., and possesses a strong thyme-like odor. A preliminary experiment has indeed indicated it to contain no less than 40 per cent. of a phenol, which is most probably thymol. The oil is distinguished from the two following by not being soluble in 70 per cent. alcohol. It gives but a very faint greenish color with ferric chloride. As thymol gives no color reaction with ferric chloride, but only its sulphonic acids or their salts, it is probable that it is ac-

companied in the oil by small amounts of another phenol.

**Oil of Mountain Mint.**—The name "Mountain Mint" or "Basil" has been given to the various species of *Pycnanthemum*, of which no less than ten occur in the United States, east of the Rocky Mountains. The species from which this oil is distilled is the *Pycnanthemum incanum* Michaux. Nat.-Ord. Labiatae.

The yield of oil from the dry herb was 0.98 per cent. It is of a pale yellowish-red color, has a sp. gr. of 0.935 at 15° C., and forms a clear solution with twice its volume of 70 per cent. alcohol. It also gives with ferric chloride a slight greenish color, changing to brown.

**Oil of Wild Mint.**—(From *Mentha Canadensis* L. Nat.-Ord. Labiatae.) The yield of this oil from the dry herb was 1.23 per cent. It is of a reddish-yellow color, has a strong odor reminding of pennyroyal, and the sp. gr. 0.943 at 15° C. It forms a clear solution with twice its volume of 70 per cent. alcohol, and gives with ferric chloride a greenish color, changing to brown.

#### Disinfectants and Disease Germs.

C. Chamberland and E. Fernbach, in a lengthy paper (*Ann. de l'Inst. Pasteur*, vii., 433) on the disinfection of rooms, describe the results of a great number of experiments with different disinfectants on bacteria in various conditions. They find that the eau de javelle of commerce, chlorinated lime (a 1 in 12 solution diluted to ten times its volume with water), and commercial hydrogen peroxide, are more active than a 1 in 1,000 acid solution of corrosive sublimate. When employed at the ordinary temperature, however, they do not act, or only after several hours, upon moist germs; but if they be heated to 40°–50°, or even higher, these germs are destroyed rapidly, a few minutes sufficing. It would seem desirable, therefore, to use disinfectants at as high a temperature as possible. Dry germs were found to be much more resistant than moist ones, for where a few minutes sufficed to kill the latter the dry forms were able to resist a temperature of 40°–50° for several hours. Before the disinfectants could act properly also, it was necessary to soak the dry germs in water, preferably lukewarm, for about an hour, after which they were as readily acted upon as moist germs. It follows, therefore, that it should be regarded as absolutely necessary that the walls of rooms should be sprayed with water before a disinfectant is employed. A noteworthy fact, to which attention is called, is that concentrated solutions of chlorinated lime are much less active than the same diluted with ten or twenty times their volume of water. This holds good whether moist or dry germs are to be destroyed, and at either the ordinary temperature or at 50° C. The *Bacillus subtilis* was the organism chiefly experimented with, being selected on account of its great resisting power. When the germs were in the moist condition, liquid cultures were mixed with disinfectants, in definite proportions, and the whole well shaken together. Cultivations were made from the mixtures from time to time, and the results checked by some of the original culture that had not been acted upon by disinfectants. The dry germs were treated upon glass slips, and not upon silk threads, as is usually the case. With regard to the action upon other organisms of the disinfectants employed, they were found to destroy in a few minutes, and at the ordinary temperature, the spores of *Bacillus anthracis*, *Aspergillus niger*, *Saccharomyces cerevisiae*, and *B. typhosus*. Thymol, and oil of turpentine were found to yield relatively bad results as disinfectants, and preference was given to chlorinated lime solution, diluted as above.

\*Prepared at the factory of Fritzsche Brothers, Garfield, N. J.

**The Cause of the Red Coloration of Phenol.\***

By CHARLES A. KOHN, PH.D., B.Sc.,

Lecturer on Organic Chemistry, University College, Liverpool.

Since alkalis (especially ammonia), metallic salts, and oxidizing agents play an important part in the turning red of phenol, their separate and combined actions on specially purified phenol has been investigated. The purest commercial phenol known as "absolute phenol," was used in a portion of the experiments; in the remainder, a specially purified sample, kindly prepared by C. Lowe, Esq., of Manchester,

This phenol was first purified by repeated distillation from glass vessels, the first and last portions of each distillate being rejected. The distilled product was then tested with hydrogen peroxide, ammonia, caustic potash, iron and copper salts, after one, six, nine and fifteen distillations, respectively.

The tests were carried out by placing 2-3 cc. of the melted phenol in a test tube and adding one or two drops of the reagent or mixtures of the reagents. The reagents were employed in various strengths.

Under all conditions a coloration was found to result even with the fifteen times distilled product, while comparative tests showed that no further purification had been effected after the second distillation. Ammonia in concentrated solution produces a deep blue coloration identical with Phipson's "phenol blue," and probably the same product as phenol-quinone-imide. The formation of this color has long been known, and seems to have been quite overlooked by Fabino in his statement that, in addition to ammonia, metallic salts and hydrogen peroxide are also necessary for a coloration to be formed. Very dilute ammonia, in common with hydrogen peroxide, caustic potash, hydrogen peroxide in presence of ammonia, or of caustic alkali, metals, or metallic salts, with or without hydrogen peroxide, produces a reddish coloration. The intensity and tint of the colors produced by these different reagents vary considerably, but in most instances it inclines to red—the color usually formed in commercial phenol. While it is not likely that these colors are identical, it is probable that they are closely allied products, and the conditions of their formation point to their being oxidation products of phenol. Gentle heating in all cases aids the formation of these colorations.

The phenol, both after nine and after fifteen distillations, was carefully tested for metallic impurities and was found to be quite free from the same. Further, in order to test whether iron and copper salts were readily carried over by phenol when distilled, the product was distilled after the addition of these metals and of their salts, with the result that after two careful distillations from glass vessels the distillate was found quite free from metallic contamination.

That pure phenol behaves as described with the above reagents was confirmed by applying the same tests to phenol purified by sublimation, and also to that obtained by the saponification and subsequent decomposition of gaultheria oil.

Of greater importance than the action of these various reagents upon purified phenol is the fact that the pure product obtained by each of the above processes does of itself become colored when exposed to ordinary moist air. The coloration, which gradually deepens from pale pink or brown to red, is always accompanied by the absorption of moisture, and the reddening is especially conspicuous in the partially liquefied parts of the sample. This coloration does not take place in

the dark, nor under red glass; it is the work of the more refrangible rays of light only.

As has often been observed, sublimed phenol does not redden as rapidly as the distilled product; in fact, according to Bidet, it does not color at all on exposure when thus purified. This, however, is not the case; the sublimed product becomes colored quite as quickly as distilled phenol when in solution, and that it is slower in turning pink when in the solid state is due to the fact that the crystals obtained by sublimation are less hygroscopic than the distilled product. In absence of moisture, under all conditions, no coloration ensues; hence the appearance of the color in those portions of the sample which have become partially liquefied. Phenol placed *in vacuo* can be exposed to light for months without becoming red, nor does it color either in presence of moisture when air is absent, or in presence of air when perfectly dry. Both air and moisture are necessary for the coloration to take place.

The similarity between the colored products formed by the action of moist air and phenol and that produced by hydrogen peroxide naturally led one to look to the latter as the real factor in the oxidation. That such is the case has been conclusively shown by Dr. A. Richardson, who has succeeded in detecting the presence of hydrogen peroxide in reddened phenol, both by the chromic acid and by the titanous acid test.

This same color is produced, together with a complexity of other substances, when phenol is electrolyzed in acid solution. The nature of the colored product formed is still under investigation, and not until the coloring-matter itself is more completely studied can any conclusion be drawn as to the course of the oxidation.

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**Report of Adulterated Oils met with in American Commerce.\***

*Oil of Bitter Almonds.*—A sample of this oil from a New York house, but manufactured by John Colville, Paris, and designated as "Essence surfine d'amandes amères," proved to be artificial oil, and contained a notable amount of chlorine compounds.

*Oil of Ambrette Seed.*—The true characters of this oil have previously been referred to (see Schimmel & Co.'s Report, April, 1888, pages 29 and 47). A sample from a New York firm, who state in their price list that their oil "is not a combination with oil orris as is the habit of some foreign manufacturers," was found to remain absolutely clear and liquid at a temperature of  $-5^{\circ}\text{C}.$ , while the true oil solidifies at  $+10^{\circ}\text{C}.$  The odor also plainly discloses the presence of copaiva oil.

*Oil of Chenopodium or American Wormseed.*—(From *Chenopodium anthelminticum* L.) Some samples of this oil from reliable sources we find to have a sp. gr. of 0.970 at  $15^{\circ}\text{C}.$ , and to form a clear solution with ten times their volume of 70 per cent. alcohol. These requirements have been adopted by the new U. S. Pharmacopœia. Some other commercial samples of this oil had a sp. gr. of 0.955 and 0.963 at  $15^{\circ}\text{C}.$ , and did not form a clear solution with the above amount of 70 per cent. alcohol. They were evidently adulterated with oil of turpentine, which could also be recognized by the odor.

*Oil of Coriander.*—The specific gravity of pure oil of coriander appears to vary, according to its origin, between the limits of 0.874 to 0.882. An excellent indication of its purity which seems not to have been as yet recorded, but which has been adopted by the new U. S. Pharmacopœia, is the fact that it affords a perfectly

\* Abstract of a paper read before the Nottingham meeting of the British Association.

\* From Semi-annual Report of Schimmel & Co. (Fritzsche Brothers), October, 1893.

clear solution with three times its volume of 70 per cent. alcohol. One sample of this oil from a New York firm had a sp. gr. of 0.890 at 15° C. and was insoluble in 70 per cent. alcohol. Another sample received from Detroit, Mich., had a sp. gr. of 0.886 and was likewise insoluble in 70 per cent. alcohol. Both of these oils were therefore to be regarded as adulterated.

**Oil of Lemon.**—Since the adoption of the physical standards (optical rotation and specific gravity) for a pure and normal oil of lemon, referred to in our last report we have received samples answering these requirements. Fraud in this oil has not entirely ceased however.

A sample of oil which had been sold at the enormous price of \$7.50 per pound, with the special recommendation that it would not be of a rancid, had the following characters:

Spec. gr. 0.855 at 15° C. Opt. rot. + 59° 15' in a 100 mm. tube. It was at first considered possible that the oil might have been increased in strength by the addition of citral, for this being quite inactive optically would reduce the rotation. On the other hand as we find the specific gravity of citral to be about 0.900 at 15° C., it was evident that no additional amount of this could be present, as otherwise the specific gravity would be higher than that of a normal oil. It would, therefore, have to be regarded as adulterated, even if sold at the ordinary price of pure lemon oil.

**Oil of American Pennyroyal** (*Hedeoma pulegioides*, Persoon).—In order to obtain a perfectly authentic specimen of this oil we have distilled a small amount. A portion of the dried herb consisting almost entirely of leaves yielded 2.94 per cent. of a dark reddish colored oil, which when rectified with water was obtained of a pale yellow color. Another portion of dried herb consisting of leaves and stems yielded but 1.3 per cent. of oil. The crude oil has a sp. gr. of 0.933 at 15° C., and when rectified 0.932 at 15° C. One volume of the oil forms a perfectly clear solution with two volumes or more of 70 per cent. alcohol. This test, which is particularly important for the detection of adulterations with oil of turpentine, has been adopted by the new U. S. Pharmacopœia. On subjecting a small portion of the oil to fractional distillation, the following fractions were obtained:

- I. below 210° C. only a few drops.
- II. 210–220° C. 24 per cent.
- III. 220–223° C. 30 " "
- IV. 223–225° C. 26 " "
- V. 225–230° C. 10 " "
- VI. Residue 10 " "

100 per cent.

All of the above fractions formed clear solutions with 70 per cent. alcohol. By further fractionation their boiling points and relative proportions would naturally change. A chemical study of the oil of American pennyroyal has already been made by Kremers (Proceedings Amer. Pharm. Assoc., 1887, pp. 546–561), and the oil of European pennyroyal (from *Mentha Pulegiun* L.) has been carefully investigated by Pleissner (Ann. der Chemie, 272, pp. 1–37) and Wallach (Ann. der Chemie, 272, p. 122).

One of the oils examined by us, from a New York drug house had a sp. gr. of 0.890 at 15° C. and was not soluble in 70 per cent. alcohol. Another specimen had a sp. gr. of 0.895 at 15° C., and was likewise insoluble in 70 per cent. alcohol. It was evident that both of these oils were considerably adulterated with oil of turpentine.

**Oil of Rue.** (*Oleum Ruta*.) In the Report of Schimmel & Co., April, 1892, p. 31, is stated that "our German distillate, which is the choicest oil obtainable,

consist for the most part (about 90 per cent.) of methyl-nonyl-ketone, and solidifies even at a moderate temperature to a solid crystalline mass."

As a basis for the comparison of other oils the following observations may be noted: A pure German oil we find to have at the sp. gr. of 0.837 at 15° C. Schimmel & Co. have previously observed the sp. gr. of 0.835 and 0.838 for Spanish oils. Pure methyl-nonyl-ketone  $\text{CH}_3\text{—CO—C}_8\text{H}_{17}$  is stated to have a sp. gr. of 0.8205 at 17.5° C. We find the optical rotation of the oil to be very slight, and, although too dark in color to be observed accurately, it is apparently about + 1° in a 100 mm. tube. It solidifies readily to a crystalline mass 0° C. It begins to boil at 215° C., and distills completely at 232° C. The pure ketone boils at 225° C.

One sample of oil of rue, labeled "Oil Rhue," from a New York house had the following characters: Sp. gr. 0.870 at 15° C. Opt. rot. — 25° in a 100 mm. tube. It does not solidify in a freezing mixture at — 180° C.

By fractional distillation the following fractions were obtained:

- 155–162° C. 40 per cent. (at 160° C. quite constant)
- 162–167° C. 23 " "
- 167–205° C. 25 " "
- Residue 12 " "

100 per cent.

The first two fractions consisted chiefly of pinene, as indicated by the boiling point and the nitroso-chloride reaction. The residue (12 per cent.) contained some ketone. These results clearly indicate that this so-called "Oil Rhue" contains at least 90 per cent. of oil of turpentine.

Another commercial specimen of oil of rue had the following characters:

Sp. gr. 0.862 at 15° C.

Opt. rot. — 3° in a 100 mm. tube.

On cooling it separated in two distinct layers. By fractional distillation it was found to have approximately the following composition:

- 45 per cent. alcohol.
- 30 " " oil of turpentine or a similar body.
- 25 " " oil of rue.

100 per cent.

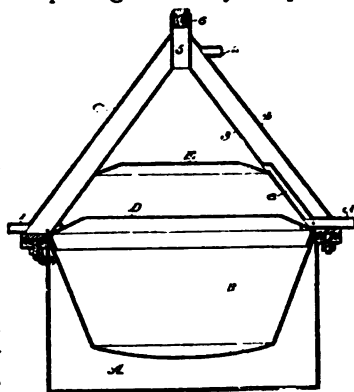
**Oil of Spike Lavender.**—According to previous observations (see Schimmel & Co.'s Report, October, 1891, p. 35) the specific gravity of this oil should be above 0.900 at 15° C., and it should form a clear solution with three times its volume of 70 per cent. alcohol. One specimen of this oil received from a customer in Allegheny, Pa., for investigation, had a sp. gr. of 0.897 at 15° C., and was insoluble in 70 per cent. alcohol. It was accordingly declared adulterated.

**Oil of Tansy.**—Although this oil is not at present recognized by either the U. S. or the German Pharmacopœia, it is nevertheless of some importance. An excellent test for the purity of this oil, which appears not to have been previously noted, is its solubility in 70 per cent. alcohol. Thus an oil of undoubted purity we find to have a sp. gr. of 0.926 at 15° C., and to form a perfectly clear solution with three times its volume of 70 per cent. alcohol. Schimmel & Co. have previously observed the sp. gr. of 0.927 for French oil and 0.930 for German oil. A commercial sample sent us for examination had a sp. gr. of 0.919 at 15° C., was not soluble in 70 per cent. alcohol, and must, therefore, be regarded as adulterated. As a provisional standard for the purity of this oil it would seem justifiable to require that, in connection with the solubility test mentioned, it should have a specific gravity not lower than 0.925.

## A NEW DRUGGISTS' STILL.

The accompanying cut illustrates a new druggists' still, patented by Chas. R. R. Beck, of Baltimore, which is described in the patent abstract as follows:

**Claim.**—1. In a still substantially as described the improved condensing hood made conical provided at its apex with a filling opening and having from base to top a surrounding water jacket provided near its top and bottom with inlet and outlet openings whereby to permit circulation of water through said jacket, a base trough arranged within the hood, and a supplemental trough in said hood above the base trough and provided with an outlet or discharge pipe substantially as set forth.



2. An improved still consisting of the tank, the vessel fitted therein, said parts having projecting lapping flanges at their upper ends, the hood having its lower end rested upon and clamped to said flanges provided at its apex with a filling opening and having the water jacket inclosing it, and provided with a water inlet and exit whereby water may be circulated through the jacket, a base collecting trough arranged in said hood and a supplemental trough arranged in the hood above the base trough and having an outlet pipe all substantially as and for the purposes set forth.

## Simple Urine Analysis.

BY ARTHUR MCKELLAR.\*

Normal urine is a pale straw-colored liquid, of a specific gravity about 1.020, slightly acid and free from any great amount of sediment. The constituents are various, phosphates, urates, peptones, and a host of smaller fry. It is principally tested for grape sugar and albumin.

Albuminous urine is generally lighter in gravity than normal, and presents rather a frothy appearance on shaking. The specific gravity of the perfectly cold liquid is taken by means of the urinometer, provided the patient has sent a sufficient quantity, a thing he or she often fails to do; indeed, one would imagine that it was an expensive article, from the small samples sometimes received. Should the density be below 1.015, albumin is pretty sure to be present. Filter and half fill a test tube with the clear liquid, and boil at the top only, so that the boiled portion above may appear in contrast with the unboiled portion below. If any haze appear drop in a little acetic acid, when, if the cloudiness be due to any phosphates or other salts, these will dissolve and leave nothing but the coagulated albumin. It is absolutely necessary to acidify, and through neglect of this precaution many mistakes happen.

Another easily applied test is to float the urine on nitric acid; if albuminous, an opaque hazy ring, more or less thick, forms at the junction of the two liquids, at the same time a darkish coloration appears, which may be disregarded, as it is taken to be an indication of the presence of biliary matter.

The best test of all is the saturated solution of picric acid (about 5 grs. to 1 oz.). This, added to the acidified liquid, produces a haze with albumin and peptones, the latter dissolving with heat. This is the most reliable test in use; a great many others have the one great fault, they are too sensitive.

Quantitatively, there is no ready method for determining albumin; it is customary to describe the amount present as "hazy," "milky," "curdy," in fact, just to give a relative idea.

With regard to the time when the urine ought to be collected, the sample should be taken after food and exercise, or, better still, from a mixture of all passed in the twenty-four hours. The erect position especially has an influence on the secretion of albumin, that taken on rising from bed being comparatively free compared with some taken later, say after breakfast.

Small quantities of albumin are found in even normal urines, and should be disregarded unless the haze is distinct.

## The Pharmacy of Bromoform.

BY WILLIAM LYON.

The common method of administering bromoform seems to have been as drops on sugar. This method is objected to by some physicians and the reason they give is that sometimes those in charge of patients are not sufficiently careful in giving the exact number of drops! and I can readily believe there is some truth in what they say. The other methods mentioned are: 1st—a solution in alcohol or in alcohol and water. 2d—suspended in syrup or in water and sent out with a "shake the bottle" label.

This last method is not what one would call correct dispensing and is open to serious objection. In the "Transactions of the American Pharmaceutical Association" Mr. P. W. Bedford suggests the following:

Take of

|                                     |           |
|-------------------------------------|-----------|
| Bromoform.....                      | 16 minims |
| Alcohol.....                        | 2 drachms |
| Glycerin.....                       | 2 drachms |
| Compound tincture of cardamoms..... | 2 drachms |

Mix in the order mentioned.

This makes a very good mixture, and, moreover, a palatable one.

Some time ago I was requested to prepare the following prescription:

Take of

|                       |           |
|-----------------------|-----------|
| Bromoform.....        | 20 minims |
| Rectified spirit..... | 2 drachms |
| Water to.....         | 1 ounce   |

Mix. Take a teaspoonful in water every six hours.

The bromoform dissolved quite readily in spirit, but on adding the requisite quantity of water it quickly separated and would not dissolve again on shaking. On communicating the result to the prescriber he gave instructions to use sufficient rectified spirit to get a solution. It was found necessary to use the spirit and water in the proportion of five to three before a satisfactory solution could be got. This overcame the difficulty so far as the dispensing of it was concerned, but unfortunately the susceptibilities of the patient (a child of three years) to the intoxicating effects of alcohol were greater than the prescriber had calculated upon, as it became partially intoxicated after taking the second dose. A continuation of the medicine in that form was therefore out of the question, and a method of giving it in solution, without the presence of such a large percentage of alcohol, had to be found. It is not very soluble in water (1 part of bromoform requiring about 550 parts of distilled water) and an aqueous solution may be passed over, as the quantity required to be taken each time would be inconveniently large. It is readily soluble in oil of almonds, olive oil, and cod-liver oil, and these might in some cases be suitable vehicles for its administration. Gelatin capsules would also be a good method, but for most children these are not available on account of them being either not able or not willing to swallow such. In emulsifying it four

\*Read at the Glasgow and West of Scotland Pharmaceutical Association meeting.

different agents have been tried, viz., mucilage of acacia, mucilage of tragacanth, mucilage of Irish moss, and tincture of soap bark.

1. *Mucilage of Acacia.*—

|                |           |
|----------------|-----------|
| Bromoform..... | 30 minims |
| Mucilage.....  | 2 drachms |
| Water to.....  | 1 ounce   |

Prepared in the usual way this gives a fairly satisfactory result. On keeping, a sediment forms, but it is readily distributed through the water when the bottle is shaken.

2. *Mucilage of Tragacanth.*—This is a failure. The bromoform very soon separates.

3. *Mucilage of Irish Moss.*—When used in the same proportion as the mucilage of acacia the result is very similar and after a time a sediment also forms, but it is more easily distributed through the water when the bottle is shaken.

4. *Tincture of Soap Bark*—

|                |           |
|----------------|-----------|
| Bromoform..... | 30 minims |
| Tincture.....  | 2 drachms |
| Water to.....  | 1 ounce   |

This appears all right at first, but the bromoform very soon separates.

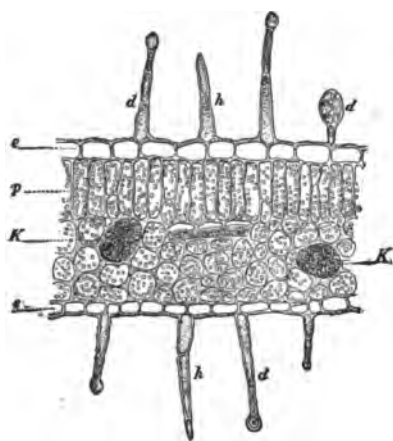
Reviewing these results, the conclusion arrived at is that where alcohol is admissible the glycerin and alcohol mixture suggested by Bedford is undoubtedly the best, but where not, then either a solution in oil or an emulsion with mucilage of acacia or Irish moss might with propriety be utilized instead.

## BELLADONNA.\*

By HENRY KRAEMER, PH.G.

### The Leaves.

**MACROSCOPICALLY.**—Belladonna leaves are of two sizes, the larger about 1½ d. m. long, the smaller being about ½ this size. They are brownish-green upon the



1. CROSS SECTION OF LEAF.

- a. Epidermis (upper surface).
- d. Epidermis (under surface).
- f. Palisade cells under which are the mesophyll cells.
- k. Crystal-containing cells (Calcium oxalate in minute crystals).
- j. Simple trichome.
- d. Head bearing and gland bearing trichome.

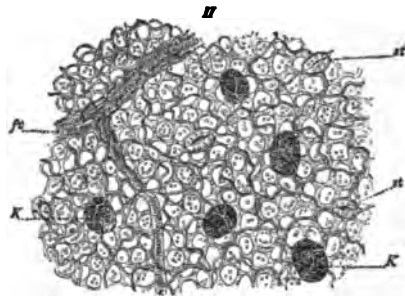
**MICROSCOPICALLY.**—The epidermal cells, on making a surface section, appear undulating. On the under surface the stomata are more numerous, near to which arise trichomes which tend to cover and protect the stomata by preventing too great evaporation and so assist the work of transpiration. The hairs are of three kinds: (a) simple jointed cells; (b) short glandular cells with one or more (3 to 4) celled apex; (c) hairs with long stalks and a spherical-celled apex. In the

mesophyll are cells containing an innumerable number of granule-like or crystal-like bodies.

### BELLADONNA LEAVES OF THE MARKET.

As found in the market, belladonna leaves, especially the finer grades, when crumpled or broken up, look very much like the mints, but are easily distinguished from them by the narcotic odor and disagreeable bitter taste. They also resemble somewhat the narcotic herbs, stramonium and hyoscyamus, but from these may be easily distinguished.

Belladonna leaves compared to the other official



11. SURFACE SECTION OF LEAF.

- st. Stoma.
- k. Fibro-vascular bundle (spiral vessels).
- k. Cells containing crystals.

leaves of the Solanaceæ are comparatively smooth and the margin is entire. The upper surface is darker than the lower surface. The undeveloped fruit, a calyx with an unripe berry, is often present.

**Stramonium** leaves are dark green and not quite so smooth as belladonna, the hairs shorter, with a many celled apex, and in the mesophyll are numerous cells containing large single crystals of calcium oxalate. The perforations and cork formations in the leaves are numerous. The base of the leaf is unequal and does not taper into a petiole. The fruit is a capsule and very often a few reniform seeds will be found present.

**Hyoscyamus** leaves are furnished with long hairs which tend to become tangled and matted, so giving the leaf a hairy appearance. There is an absence of petiole and a presence of stem stalks. The fruit is a pyxis enclosed in an urn-shaped calyx. The seeds are much smaller than stramonium.

**Solanum nigrum** leaves are much smaller than belladonna with a repand dentate margin. (Wigand.)

In a note on Belladonna Leaves of the Market, by E. R. Squibb, M.D. (Ephemeris), Dr. Squibb says:

When the prevailing color is fairly uniform and fairly green—not brown—when the appearance and odor are free from mustiness and without signs of previous dampness and fermentation, when free from admixture with dissimilar leaves or parts of leaves, as digitalis, hyoscyamus weeds, etc., and when seed capsules with ripe seeds are found, the parcel may be accepted as fair quality and gathered at the proper time. If the leaves appear to have been all very large and are very green, and no capsules to be found, somewhat like the fancy leaves sold in bottles at high prices, this is a sign of cultivated plants, harvested when the leaves are most succulent but not most active. Though very attractive and handsome such leaves are less active than the wild plants taken at maturity. When a careful buyer is shown various samples of belladonna, not a word of the official description is of any avail to him and he only knows that what is before him is belladonna from having seen it more or less frequently, and the grades of quality are also wholly judged by an experience which can hardly be conveyed by any description. But belladonna is frequently seen with a very considerable admixture of other plants, recognized and unrecognized, as though whole patches of ground had been mowed where belladonna was simply the prevailing production. These low, cheap grades are generally sold for powdering, and then all discrimination is at an end, because all the landmarks of character and quality are gone.

A very small number of those who know belladonna, a still smaller number of those who make preparations from it—and none of those who either prescribe or take it—ever see it in the leaf, in bales as it comes from abroad. The importing jobber or the wholesale druggist imports it and has it powdered, and the pharmacist or physician simply buys the powder.

### The Root.

#### MACROSCOPIC CHARACTERS.

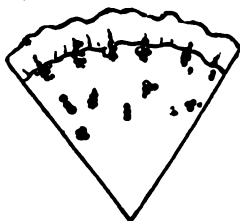
The root of belladonna is a fleshy, spindle-shaped primary root. When fresh it is about five d. m. long and about five c. m. in diameter. It then possesses a number of stout branches, the remnants of which are sometimes seen attached to pieces of commercial root. The bark contains the largest amount of alkaloid, therefore roots are selected by careful buyers which possess the larger portion of bark compared to the

\*From advance sheets of a monograph on belladonna edited by F. B. Kilmer and published by Johnson & Johnson.

woody portion.\* Young roots of but two or three years are preferred. Chemical analysis shows that the amount of alkaloid in roots collected about the time of flowering is twice as much as in Spring, so roots should be collected about the flowering and fruiting season, carefully dried and preserved.

The commercial root, to hasten the drying, is invariably split into smaller pieces. It occurs in rough, irregular pieces from a few inches in length to six, eight or even 12 and 15 inches, varying in diameter according as the root is split. Externally it is longitudinally wrinkled, of a pale brown or grayish color, internally brownish or whitish, odor heavy and licorice-like, taste peculiar, characteristic, sweet at first and afterward acrid or bitter. The fracture may be mealy, horn-like or woody, and from these characters may be distinguished three commercial varieties.†

(1) **MEALY BELLADONNA.**—Is lighter externally and internally than the other two, and on cross sections it is of a nearly uniform dirty white appearance. The bark is about  $\frac{1}{4}$  of the cross section. At the periphery of the fundamental tissue of the pith are yellowish vascular bundles scattered apparently indiscriminately. These finally disappear beyond the cambium. Starch is present throughout all the cells of the wood and bark, which is colored blue by iodine. In Spring and Autumn roots the starch is present in the largest amount.



(2) **HORN-LIKE BELLADONNA.**—Is very dark. On cross section it looks brownish and waxy, or horn-like. The bark is separated by an indistinct cambium from the woody portion, of which the fibro-vascular bundles are arranged in single groups and separated from each other by one or more broad bands of a horn-like tissue. (Keratenchym.) In the tissue of both the wood and bark occur numerous cells filled with crystal-like contents appearing to the eye as white spots. This variety looks more like inula root, and is much smaller generally than the other two. The starch grains are replaced by a dark, resinous material.

HORN-LIKE BELLADONNA ROOT CROSS SECTION.

(3) **WOODY BELLADONNA.**—This form possesses characters between the other two. The color is more of a light brown or gray. In cross section the bark resembles the horn-like variety. Inside of the cambium ring is found a prominent, radiating, woody zone with the largest duct in the very center. The wood bundles have prominent yellow ducts and are separated by equally prominent broad medullary rays. This variety is generally figured in text books. Starch grains are not so numerous as in the mealy variety, still they are abundant.



WOODY BELLADONNA CROSS SECTION.

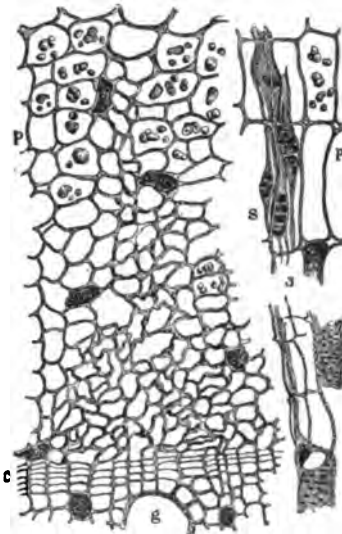
\*Woody fiber predominates in old roots as well as in some fairly young specimens grown in certain localities. Roots which are woody, tough and break with a splintery fracture, as well as hollow stem bases, should be rejected in selecting for pharmaceutical preparations.

Very little alkaloid can be found, except in the bark, in woody specimens; the woody portions have been reported as yielding no alkaloid whatever. (Maisch.)

†Works consulted:   
 Lehrbuch der Pharmakognosie von A. Wigand.   
 Anatomischer Atlas zur Pharmakognosie von A. E. Vogel.   
 Pharmakognostischer Atlas von J. Moeller.   
 Traité Pratique de la Détermination des Brogues.   
 Simples par G. Planchon.

## MICROSCOPICALLY.

The cork consists of thin layer of cells, next to which is arranged the cortex. In the latter are numerous cells filled with crystal-like particles, called by Wigand *krystalmehl*, and by Moeller *krystalsand*. These are very common characteristics in both the roots and the leaves of belladonna. The sieve tubes are scarcely perceptible in the bark of young roots, but later are formed in groups more or less wedge-shaped like the wood bundles. These sieve tubes show a beautiful sieve plate in longitudinal section. Stone cells are wanting. As regards the bast in belladonna authors disagree.\* Wigand (4th edition, 1887) mentions the presence of bast. Prof. Schrenck announced in the AMERICAN DRUGGIST (1887, 2) that he had detected bast cells in belladonna root, but found it necessary to remove the starch and stain the cells. The writer examined a mount made by Prof. Schrenck from the belladonna root of commerce (Oct. 16, 1886) mounted in glycerine jelly, and stained apparently with phloroglucin, and readily made out bast cells. Upon further investigation he found it unnecessary to use clearing and staining agents to discover them. The ducts are provided with elliptical pores. The wood bundles are surrounded by wood parenchyma (colored yellow by potassium hydroxide solution), the bundles separated from each other by radially broad medullary rays.



1. Cross Section of Root.

p. Rind-parenchyma with starch and crystal cells.   
 c. Cambium with a cuneated sieve-tube.   
 g. Xylem portion (duct).

2. Radial Longitudinal section of root.

p. Rind parenchyma.   
 s. Sieve tube showing plates.   
 j. Tangential section, showing wood parenchyma and ducts.

Both the wood and bast parenchyma contain starch. The starch grains are of medium size, in shape round, irregular or hemispherical, or even two or three sided; single and sometimes compounded of two or four starch grains. Some of the grains possess a distinct cross cleft or stone-like nucleus; in others, however, the stratifications are scarcely apparent. With sulphuric acid alone large numbers of prismatic crystals are produced. With sulphuric acid and bichromate of potassium a greenish coloration is immediately produced, remaining sometimes twenty-four hours or more. This will be a help in determining this root.

The starch of belladonna root as already described by Prof. Bastin (see this journal for September 28, page 186) is given attention by Prof. Bastin.

A note by Dr. Squibb on the root as found in the market is then quoted and we give a portion of this note herewith.

The powder is of a dirty, whitish color, and everything else being equal, the whiter and handsomer it is, the poorer. Old, discolored and damaged root is not very infrequently "brought up" in color in the grinding process, and would not be salable if this could not be done, since it would not be handsome enough.

The roots though originally cylindrical are generally split to facilitate drying. At least, all the larger ones are split in the best parcels of the drug. They are somewhat wrinkled longitudinally, but perhaps more wrinkled transversely, and most of the markings are transverse. The fracture is squarely transverse, but not smooth, and the exposed structure is spongy; the spaces radiating from the center.

The peeled root is commonly preferred in the market and commands a higher price; but it has been repeatedly shown that the fashion of peeled root is kept up by the sale of the peelings to the makers of atropine. At least, if the root be judged as it is met with in the market, the peelings would yield more alkaloid than the entire root, and considerably more than the peeled root.

## Medical Notes.

**Quinine as a Wound Dressing.**—It has been found, according to an Italian authority, that non-infectious wounds heal rapidly, while infectious wounds are unaffected when treated with a 1 per cent. solution of quinine.

**Mentholated-creasote oil injections for tuberculosis** have been recommended by De la Jarrige at the Paris Tuberculosis Congress. He uses the following: Sterilized oil, 100 grammes; creasote, 10 grammes; menthol, 5 grammes. Inject 30 Cc. of this directly into the trachea.

**Oxalic acid as an emenagogue** is recommended by Lardier in the form of a mixture containing 2 grammes of the acid dissolved in 400 grammes of water, 40 grammes of glycerin and 60 grammes of syrup of orange flower water and administered daily (*Rev. Ther. Med. Chir.*).

**Guaiacol Injection for Tuberculosis.**—Weill and Diamantberger recommend (*Rev. Ther. Med. Chir.*) the injection of equal parts of pure guaiacol and sterilized sweet almond oil, beginning with 12.5 Cc. for each injection gradually increased to 50 Cc. when the frequency may gradually increase to as high as 8 injections per day.

**Remedy Against Epilepsy.**—S. A. Siminoff (*Med. Obsr.*, xxxix., 1893, No. 4, pp. 391-2) details three cases of epilepsy cured by him by the administration of an infusion of common tansy. He has also used this infusion with good effect in cases of neurasthenia, where valerian had ceased to be effective. A glassful of the infusion of the herb (either fresh or dried) is given to the patient at night and in the morning.

**Iodized Collodion in Alopecia.**—Dr. Chatelain (*Monat. Therap.*) recommends the treatment of alopecia areata by iodized collodion, in the proportion of one part of iodine to 300 of collodion. The patch is rubbed with a 1 : 1000 solution of corrosive sublimate, and then painted with the collodion. The iodine is thus allowed to remain in contact with the patch of alopecia for a long time. When the artificial pellicle falls off, the process is repeated. Cases rebellious to other forms of treatment are frequently cured within two months by means of iodized collodion, it is claimed.

**Antipyrine in Epistaxis.**—In idiopathic epistaxis Dr. Guénot, of Laroche-en-Breuil, has frequently found a local application of antipyrine to be of great service. As a rule he employs a solution of the strength of 1 in 5, but in mild cases a 1 in 10 solution is strong enough. He directs the patient to pour a little into the hollow of the hand and to inhale it vigorously. In the case of young or intractable children this method is, of course, not applicable. Here a syringe must be used and after the nostrils are filled they should be compressed for a moment so as to allow the antipyrine time to act.—*Lancet*.

**The Treatment of Tuberculosis with Cinnamic Acid.**—Prof. A. Landerer, of Leipsic, who first advocated the treatment of tuberculosis with cinnamic acid in a monograph published in 1892, sums up the results of his own clinical experiences of the method in Nos. 9 and 10 of the *Deutsche Med. Wochenschrift*, 1893. The method consists of intravenous injections of a 5 per cent. alkaline emulsion (yolk of egg) of cinnamic acid. The dose varied, as a rule, from 3 to 6

minims, never exceeding 10 minims, and in the case of very weak patients an emulsion of the strength of  $\frac{1}{2}$  to 1 per cent. was used. No unpleasant complications or sequelæ were observed, and Landerer ascribes the destruction of the tubercles to a general leucocytosis set up by the chemotactic action of the cinnamic acid on the leucocytes themselves.

**Clinical Experiments with Alumol** have convinced Dr. Wm. S. Gottheil that (*Med. Record*) in alumol we possess a remedy of permanent value in a number of diseased conditions. It is an astringent which is at the same time antiseptic and non irritating. In its pure condition it might prove irritant, and in one of the cases recorded above it was undoubtedly used in too great concentration, but under ordinary medicinal conditions it has never caused the least pain or trouble. Over nitrate of sodium it possesses the advantage of not forming an insoluble albuminate to stop the further action of the remedy, nor does it stain the clothes. In all inflammatory skin diseases, even the most acute, it deserves a trial. In the chronic form it holds its own with any of the older remedies. In the parasitic diseases it does not seem to possess any marked advantage over other drugs. It succeeds in some and fails in others, as they do. In the syphiloderma its action was not satisfactory. The gonococcus apparently survives in its presence. It possesses some marked advantages over the permanganate of zinc and other older astringent antiseptics in its non-irritating nature.

**Diaphtherin.**—Stabel (*Munch. med. Woch.*, September 10, 1893) has investigated the powers of diaphtherin in arresting the development of micro-organisms and in killing spores, as well as its pharmacological properties. Broth to which diaphtherin had been added was inoculated with various kinds of micro-organisms, and similar experiments were made with lysol and carbolic acid. The author concludes that diaphtherin greatly excels both these latter. Anthrax spores lost all power of growth after being in a 15 per cent. solution for three days. From a series of experiments on animals the author concludes that even the continued use of diaphtherin in man cannot be injurious, as it could not be used in sufficient quantities to be dangerous. It is especially adapted, on account of its non-poisonous properties, for washing out hollow cavities where at present very weak antiseptics have to be employed. It is to be preferred in 1 or 2 per cent. solution to other antiseptics where moist applications are required for a long time, as in burns, ulcers, etc. It only discolors the nails and hands when previously soaked in sublimate solution. Steel instruments must not be put into it.

**Treatment of Alcoholic Inebriety.**—The treatment Dr. Peterson (*Amor. Am. Med. Assn.*) outlines for the removal of the alcohol habit, and which he has often found very efficacious, is briefly as follows: (1) The hypodermatic inject on of strychnine nitrate  $\frac{1}{32}$  grain [1-2 mg.], at least twice daily, more frequently if possible, and always by the physician himself. The moral influence and personality of the physician are of the greatest importance. By this frequent contact of physician and patient, the effort and attention of the inebriate are kept continually at their highest pitch. (2) A diet of milk, eggs, and vegetable

foods should be enforced, meats being allowed but once daily. (3) Regular occupation, regular hours, and the avoidance of the society of fast companions, must be insisted upon. (4) There is a certain class of patients to whom a substitute for a dram of liquor is at times imperative; when the desire comes on, it must be satisfied. The substitute must be immediately at hand. With some of these, a combination of strychnine and fluid extract of cinchona ( $\frac{1}{8}$  grain [0.8 mg.] to 1 fl. dr. [375 Cc.]), taken with a glass of water, is said to work very well. It is not always convenient, however, to carry a bottle in the pocket; so the author has at times prescribed powders composed of 20-40 grains [1.25-2.5 Gms.] of red cinchona bark,  $\frac{1}{2}$  grain [3 ctg.] of capsicum, and 3 grains [20 ctg.] of powdered nux vomica, to be taken with a glass of water when required.

**Chloralose.**—Ferrannini and Casaretti (*Rif. Med.*, August 11, 1893) have made a series of observations on this remedy, which has already been studied by Richet, Maragliano and others. The clinical results lead to the following conclusions: 1. Chloralose is highly successful in insomnia from over excitement of the physical centers; it is preferable to chloral in the insomnia accompanying heart disease; it is better tolerated by the digestive tract than any other hypnotic; it acts extremely well in cases in which insomnia is due to disorders of the digestive tract; it is inferior to morphine and similar hypnotics if the insomnia is due to pain; it has no cumulative action; it acts equally well if given several evenings in succession. 2. Without causing any intolerance, chloralose is a certain hypnotic in doses of from 15 to 40 centigrammes given by the stomach; of 20 to 40 centigrammes by the rectum; of 5 to 10 centigrammes by the hypodermic method. The amount of tolerance, both by the cardio vascular and the digestive system, is remarkable. If these doses be exceeded, phenomena of poisoning may make themselves manifest similar to those seen in animals. 3. Should it happen in any case that the above doses are insufficient, it is allowable to increase them, but with great caution, noting carefully the effect of each increase of 10 centigrammes. In no case, however, should the dose exceed 1.2 gramme, either by the mouth or rectum. 4. In certain nervous disorders, such as hysteria and chorea, the drug may be successful in calming the convulsive phenomena in the same dose as the hypnotic ones already stated.

#### Sanscrit Medicine.

Mr. Stephenson, of Bombay, contributes to the *Pharmaceutical Journal* a curious account of a very ancient Sanscrit manuscript treating of medicine and containing prescriptions largely used by the hakims or native doctors in India. The favorite form of medication appears to be oil, and the process of distillation is a very primitive one.

A quantity of the bruised drug is mixed with a proportion of milk; this is left to macerate for four or five days, after which it is put into a vessel made of metal or glass. This vessel, which consists of two flask-shaped portions, the necks of which fit into one another, is now closed and the lower or empty part buried in the ground while the upper part, which contains the drug, remains exposed above the earth. A fire is now kindled round the upper part of the vessel and the oil eventually collects below.

As a specimen of these prescriptions may be noted the "oil of sulphur" warranted to cure every disease known, if taken internally in doses of one drop on betel leaf and prepared as follows: Take of purified sulphur six parts; juice of calves' dung a suffi-

iciency. Rub the sulphur in a mortar with sufficient juice to wet it daily for three days, then distil. Some of the external remedies are very peculiar, and for swelling of the neck, from which many of the natives suffer, several curious applications are suggested. Mango seeds and horse-hoof parings burnt together in a pot and mixed with butter is one, while another consists of camel's bones and buffalo's horns in powder mixed with sweet oil in which the flowers of *Camra indica* have been boiled. But the favorite specific for the complaint is a necklace of black serpents' bones, strung together and worn round the neck. This is, however, a costly prescription, since such necklaces are valued as high as eighty rupees. Mr. Stephenson thinks that these remedies act very often simply as a mask or blind, while the patient is being subjected to rigorous hygienic treatment, otherwise it would be difficult to account for the many wonderful and authentic cures wrought by the native medicine men of this and similar countries.

#### Ruthenium Red.

At the meeting of the Paris Academy of Sciences, on December 26 last, a note was communicated by A. Joly on certain compounds formed by the action of ammonia on ruthenium sesquichloride (*Comp. rend.*, cxv., 1299). One of these compounds, the ammoniated oxychloride of ruthenium, was obtained in the form of small brown crystals which formed a red transparent solution that appeared violet by reflected light. Its staining power could only be compared with the strongest coloring matters of organic origin, silk being dyed reddish brown by simple immersion.

The dry substance was not affected by light, but the aqueous solution was decolorized slowly by the sun's rays, depositing at the same time a brown precipitate of sesquioxide. Decomposition proceeded more rapidly on boiling. The oxychloride was insoluble in alcohol, which precipitated it from aqueous solutions, and this fact was taken advantage of to purify the compound.

More recently (*Comp. rend.*, cxvi., 653) the use of this ruthenium red as a histological stain has been advocated by L. Mangin. He describes it as soluble in water, concentrated calcium chloride solution, or alum solution; insoluble in glycerin, alcohol or oil of cloves. Dilute mineral acids (one per cent.) decolorize solutions of the red or turn them brown, but the original tint is restored by alkalis, though an excess of the latter causes a granular precipitate to form. Dilute organic acids (five per cent.) do not affect the color.

In its action upon vegetable tissues, etc., the compound is distinguished by not affecting cellulose or callus, and by its variable action on pectic compounds. It acts powerfully on gums and mucilages derived from pectic compounds, without coloring the mucilages formed from cellulose or from the products of the liquefaction of callus. In conclusion, Mangin asserts that ruthenium red is the best reagent for the pectic compounds associated with cellulose in young tissues and in older tissues which have not been modified by the action of foreign matters. Further, he claims that it is the only reagent for the transformation products of pectic compounds, that is to say most gums and mucilages.

#### FOR FACIAL NEURALGIA.

[*Medical News.*]

Sulphate of quinine, { ..... ii grs.  
Dover's powder, {  
Ext. of valerian, q.s.

For one pill. Four daily, seldom fails.

(Written for The American Druggist and Pharmaceutical Record.)

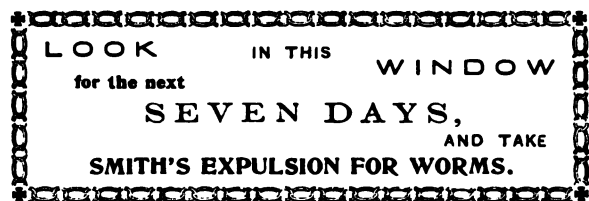
**TIPS ON ADVERTISING. XIV.**

BY MILTON J. PLATT,

Brooklyn, N. Y.

First of all, then, let the windows of the store be cleaned as a matter of business, say once a week, on a notably busy morning, if one is busier than another.

"There's nothing new in cleaning windows!" True. But there is in the paraphernalia connected therewith. Every one possessed of the most feeble powers of observation knows the operation of shop window cleaning attracts attention. Here, then, is the opportunity to display a placard extolling the virtues of some proprietary article of the druggist's own get up, or those of one he is well stocked with and wishes to boom. Say something like this:



During the next seven days the window should be liberally dressed with samples of the article to which attention has been drawn. If the store has more than one window to be attended to, a different placard and of course a different article should be used for each. It should be borne in mind that in no window can effective display be made at one time of *all* the goods in the store any more than one advertisement in a newspaper or one circular could be so constructed as to call attention properly to more than but a very limited number of articles. One line of goods at time, in fact, has been proved over and over again to be a good way to do advertising, and one at a time would prove just as beneficial in store window dressing. If the window to be dressed is a large one, two or perhaps three lines might be run in at one time. It would then be well to have the placard read:

THIS WINDOW will be Worth  
looking at for the next  
SEVEN DAYS. So will our stock of  
SPONGES,  
RUBBER GOODS,  
AND PERFUMES.

Such a placard need be nothing more than a large sheet of manila paper, with the lettering hand-brushed on. A common wooden frame, knocked together from pieces of old boxes, could be used to tack it to, and of course it should be conspicuously placed during the window cleaning operation. It should be put in the window the moment the clerk begins to clear out the stock that has done duty for the week already passed, and should never be out of sight until the redressing is completed. The changes in the window display would have to suggest themselves to the manager. That they could include almost everything but the articles used in the prescription department is patent to every one.

The window cleaning and dressing and the placard making are comparatively inexpensive, as such help as is required to perform the work is generally on hand. The next item should be the employment of as much space in the local newspapers as the extent of the business will afford, the matter of the advertisement being changed like the window every week, and should refer to the same articles as are in the window that week. It might con-

tain a few lines relating to the drug business in general, but even these should also be varied.

I would also suggest that in a conspicuous position—perhaps at the entrance to the store—a card, not too large,

We have  
**TOOTH  
BRUSHES**  
as low as  
**12 CENTS.**  
Good ones, too.

A New  
Invoice  
of  
**SPONGES**  
Arrived  
Yesterday.  
They are good and cheap.

**POUNDS  
ECULIAR  
ILLS**  
are sold here at  
**49 CENTS,**  
Elsewhere \$1.

say 11 x 14 or 18 x 24—these are regular stock-paper sizes—be placed, on which it would be well to say something of this kind to passers by and to those entering the store.



**. A TUB .  
.. OF ..  
BUTTER**

Very strong butter too. Fat is a good thing in cold weather. Butter makes fat, but not so fast as Cod Liver Oil. Cod Liver Oil of the right kind builds up the system, so as to resist colds and coughs. I have the

right kind, and have it

**PLAIN, IN EMULSION,  
IN WINE, IN CAPSULES.**

"STARVE A FEVER, STUFF A COLD."  
Cod Liver Oil is both food and medicine.

Chest Protectors are the right thing too, particularly if you have to be out at night. They are cheaper than medicine. Come see what I have in this line.

Drugs,  
Perfumes,  
Holiday Goods.

**GEORGE W. WHEELER**  
MUSKEGON, MICH.

The drug man, by changing this every day—it need, like the placard, be only a sheet of manila paper, hand painted—would find that by thus running the gamut of the goods he had to sell, a note could, and would be struck every time that had the power of drawing the attention of at least a few people to something they were in need of—hence business would be actually created.

I have no sympathy with the prescription blank as supplied by druggists with their cards on to physicians. A self-respecting physician rarely uses them; and a self-respecting patient does not go to the drug store whose name is printed on the back of the prescription out of pure cussedness, unless no other store happens to be available. A much better way to stimulate the work of

the prescription department, without giving offence, and certainly one possessing strong drawing features, would be to have posted in the store (carefully lettered this time) a neat card containing the names of the medical

every week. Advertise in harmony with the store movements. Push the prescription trade gently but firmly. Above all let honesty characterize *all* your dealings. Keep promises.

### OUR BOOKS

show that during the past three months we have dispensed the prescriptions of

|                      |                         |
|----------------------|-------------------------|
| Dr. A. B. Guernsey,  | Dr. D. B. St. J. Reesa, |
| Dr. Cyrus Edson,     | Dr. C. Inslee Pardee,   |
| Dr. R. G. Eccles,    | Dr. Wm. M. Polk,        |
| Dr. Heratio C. Wood, | Dr. Hobart A. Hare.     |

men whose prescriptions have recently been made up. The card need not be a costly affair, costing, perhaps, a dollar or two, including frame. It would serve the purpose of a reminder to visitors to the store that the business carried on was not exclusively that of retailing proprietary articles.



### A PECK OF TROUBLE

#### MAY BE SAVED.

From croup, coughs, etc., by having a family medicine chest well stocked with household remedies. We have these chests with just what is needed for emergencies, in compact form, easy to get at, always ready. The prices—well, you may suit yourself.

We have other things besides medicines for these little "troubles." Teething rings, toilet sets, brushes, etc. Come see those chests.

**G. W. JACKSON & CO.,**

Prescription Druggists,

SCRANTON, PA.

As to circular advertising, let the reader take his own experience of circular reading as a guide, the amount of money he has spent, or the number of places he has patronized as a result thereof, and I think he will be discouraged from relying much upon this as a means of increasing his business.

Clean up shop. Change the stock in the windows

### Writing the Advertisements.

Nobody needs to be told how to say that he has the best goods and the lowest prices in town. Anybody can say that, and the fact that so many fellows do say it is the reason why advertising is so often disbelieved. As all intelligent writers upon advertising avow, there must be truth and candor in the advertisement or it will soon lose its value. This from a recent issue of the *Dry Goods Chronicle* contains so many advertising truths in small compass that we are glad to reproduce it.

It is freely admitted that there are hosts of ignorant people and that a large portion of those who are not ignorant are yet wofully inexperienced as to the qualities of goods. These people are ready victims of false assertions as to the realities of merchandise and its value, but we contend that most, even of the ignorant, learn in time whether they are well served or not. Then, too, the prejudices are strong and, once convinced that they have been swindled, they will stay away from the unworthy merchant.

Now the question is, how to impart to a truthful statement of one's inducements elements of interest and of convincingness. One way is to take the reader into your confidence and tell him just how you feel about it. "One touch of nature makes the whole world kin," and confidence is begotten by bestowing it. As was remarked recently in these columns, write advertisements as you would talk to a customer whose opinion of your veracity was of value to you.

Another "touch of nature" is obtained when you hit upon some familiar experience of your reader. People respond to a sentiment or an experience instantly and heartily if it has been their own, and they will follow you from such a point.

### A Tooth Powder Window.

A. F. Ruhl, of Mannheim, Pa., writes us as follows: The more I study advertising the more interesting it becomes. I have this week a display of tooth brushes, tooth picks (4 varieties) and dentifrices in my show window. To one side I have a half gallon salt mouth jar containing tooth powder. This I have so placed as to partly empty onto a piece of paper, with stopper in the midst of powder to make it appear as if the jar had toppled over and the contents spilled out.

It has proved quite a success in attracting the attention of passers by.

I hear a number of times in a day such amusing phrases as these: "Say, here was an accident!" "Say, mister, something is spilled in your window!" and many others.

### Comic Illustrations.

The majority of the specimen advertisements in this series have contained comic illustrations.

So as to encourage the use of illustrations in the advertisements of the retail druggist we have decided to offer electrotypes of any of these illustrations at fifty cents each.

These electrotypes do not include the reading matter. If it is desired to include all of the reading matter except the name and address the charge will be one dollar, but unless otherwise specified the illustration alone will be forwarded.

All orders must be accompanied by the cash and addressed to the American Druggist Publishing Co., 37 College Place, New York.

## News and Notes.

### Random Notes of a Rambling Journey.—III.

#### CHARLESTON.

Charleston, S. C., is a pleasant old-fashioned Southern seaport of great historical interest. In the middle of the entrance to its harbor lies Fort Sumter, which at the commencement of the Civil War was occupied by Major Anderson and a small body of Union troops. The first shot in the war was fired on January 9, 1861, by the cadets of the South Carolina Military Academy, better known as the Citadel cadets; their guns being trained from Morris Island against a vessel trying to take reinforcements to the Union troops in Fort Sumter. On April 12 Fort Moultrie and the other batteries opened fire on Fort Sumter, and the Stars and Stripes were hauled down on the following day. In 1863 the Federal fleet invested the harbor and began a bombardment of the forts and the city which lasted, with scarcely an intermission, till the final evacuation of Charleston in 1865.

With regard to the drug interests of Charleston, I am unable to say much that may have direct technical or business interest to the reader. There are a few fairly well appointed pharmacies where a general business in drugs, paints, oils and veterinary supplies is done; as well as a limited number where more of a distinct family dispensing business is transacted. But the natives of Charleston are inclined to the lethargic in their movements and certainly take things easy. Among the druggists of Charleston I was unable to detect any evidences of the spirit of enterprise and business sagacity which distinguishes the craft in our metropolitan or live Western cities. The business prosperity of Charleston, or what passes for it, comes mainly from its large export trade in phosphates and fertilizers, the annual value of the export of these articles amounting to about \$8,500,000. A considerable trade is also carried on in timber and rice, and cotton is turned out in large amounts for shipment to other ports.

In a city of so little business enterprise I was not surprised to learn that price-cutting is practically unknown. At present the only topic of anything approaching to interest is the operation of the South Carolina Dispensary Liquor Law, an enactment framed and put in operation by Governor Tillman, whose name is inseparably associated with it. The measure was enacted by Governor Tillman with a view of strengthening a depleted State treasury; but in Charleston it is regarded as a direct blow at the business interests of the city and a measure to restrict the liberties of its citizens. The essential features of the Tillman Act were fully described in the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD shortly after it became law; but in view of the interest which is manifested by all classes in what many intelligent persons allude to as "this extreme eccentricity of Governor Tillman" it may be well to refer again to its chief provisions.

This law makes the State itself, through its regularly erected dispensaries, the sole liquor dealer within its own borders. All

liquor must be kept in these dispensaries and sold therefrom in official flasks, in which are blown a palmetto tree and the letters *S. C. Dispensary*.

The official label, as shown below, must also be attached to each bottle of whisky sold. Literally interpreted, the law, which is said to be loosely and illogically constructed, would render the practice of pharmacy in the State impossible.

The consensus of opinion among Charleston pharmacists is that the law is arbitrary and unjust, as it places them at a business disadvantage with members of the craft in other States. H. C. Plenge, of Broad street, who is a graduate of the Philadelphia College of Pharmacy class of '84, and conducts a typical old-fashioned pharmacy, spoke freely of the effect of the new law on the dispensing business of druggists. He said: "It is a measure to increase the income of the State at the expense of the city of Charleston, and although it interferes greatly with my dispensing business, I do not propose to either test its constitutionality, or evade its provisions, but will quietly submit until such time as South Carolina elects a more

not be punished for contempt of court in seizing the liquor. Upon a hearing of the case he was adjudged to be in contempt and was committed to the custody of the United States Marshal. The attorney-general of the State then brought the case to the United States Supreme Court on a motion for the constable's release upon a writ of habeas corpus, contending that the Circuit Court had no jurisdiction in the matter to enter any order respecting the action of the constable.

After reviewing the case at great length, Chief Justice Fuller stated the opinion of the Supreme Court to be that the Circuit Court did have jurisdiction of the matter; and, further, that because the seizure of the liquor as made by the constable was not expressly authorized by the statute under which he claimed to act, he was not justified in making such seizure. The motion for writ of habeas corpus was therefore denied.

In the course of his opinion Chief Justice Fuller said:

The possession of property by the judicial department, whether federal or State, cannot be arbitrarily encroached upon without violating the principle which requires co-ordinate departments to refrain from interference with the independence of each other (In re Tyler, 149 U. S.); and the position that a petty officer can take property from the possession of a court without permission and without warrant "upon his own motion and without instructions from any other person," as petitioner admits he did, because in his view the duty is imposed upon him by a particular statute, and that the court is without power to pass upon the questions involved, or, if it does so, that its judgment may be treated with contemptuous defiance, is utterly inadmissible in any community assuming to be governed by law.

Alcohol purchased from the county dispensaries, the only legal source of supply in South Carolina, costs \$2.50 per gallon without rebate, when bought in quantities less than 50 barrels. For a quantity exceeding 50 barrels the price is \$2.25. The cost per gallon to ordinary consumers is \$4.

A. W. Eckel, president of the South Carolina State Pharmaceutical Association, is a Charleston pharmacist doing business in King street.

Pharmacists, as well as other storekeepers of Charleston and Southern cities, appear to find it necessary to display a card on the glass doors bearing the words "Open" to indicate that the premises are open for the transaction of business. This struck me as a primitive device, but is apparently rendered necessary by the fact that owing to the warmth of the climate the doors are comparatively seldom closed during business hours.

THOMAS J. KEENAN.

### A Popular Fad.

The high esteem in which the public hold "beef, iron and wine" means money to the pharmacist shrewd enough to avail himself of the opportunity.

It is necessary, of course, first of all that the preparation be good, second that it be cheap, third that it be nicely put up, and fourth that you let people know you have it.

H. K. Wampole & Co., Philadelphia, can sell you a preparation fulfilling the first three requirements, and if you have been reading our "Tips on Advertising" you can very probably satisfy the fourth.

Write them for a few samples of the lithographed labels which they furnish free and mention THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD when writing.



public spirited Governor." This feeling is general throughout the city, but all of the citizens are not so conscientious as Mr. Plenge. "Blind tigers, as the places where intoxicating liquors are illegally sold and consumed are called, are to be found on every block, and intoxicating liquors for immediate consumption can be procured without the slightest difficulty. The prescription of a physician who orders intoxicating liquors for medicinal purposes does not "go" in Charleston at present, and both physicians and pharmacists are consequently opposed to the law which has brought about this strange state of affairs. In the courts many decisions adverse to certain phases of its operations have been rendered, the bulk of them having reference to the law regulating interstate commerce. A case which grew out of the seizure of a barrel of whisky by a State constable, the barrel having been delivered in South Carolina prior to the passage of the law, has just been decided by Chief Justice Fuller. The constable who made the seizure was brought before the United States Court to show cause why he should

**'Students' Day' at Seabury's.**

Thursday last was students' day at the Seabury Pharmacal Laboratories in East Orange, New Jersey.

The invasion of the works was effected at about 9 o'clock in the morning, the invading forces numbering about 150 of the students of the New York College of Pharmacy, being led by Professors Coblenz and Madison, and Trustee Theo. Louis. A. H. Mason, the secretary of the corporation of Seabury & Johnson, and George Seabury himself, accompanied the party which went out from Jersey City to the factory on a special train.

The party were shown over the entire plant, inspecting the various processes in full operation. Seward W. Williams, the superintendent, acted as guide, being assisted by Dr. H. Loviss, Dr. Hynard, the bacteriologist of the works, and Messrs. Sayre, Beverly, Parker and other members of Seabury & Johnson's staff.

Owing to the facilities required for storage, necessitated by the increasing demand for goods manufactured by the Seabury Pharmacal Laboratories, a three-story brick building, 40x117 feet, with independent engine and elevator has been added to the plant since the works were last opened to the inspection of students of the different colleges. The overcrowded condition of the works has therefore been considerably relieved. The plaster department has been enlarged by 50 per cent. and the principal packing room by 25 per cent. New and improved mechanical facilities have been and are now being added in several departments, thereby increasing the output, and at the same time adding to the comfort of the employees, a matter which has always received the utmost consideration by Mr. Seabury. An electric fire-alarm system, consisting of nineteen stations, connecting with a large gong and indicator in the boiler room, renders practicable an instantaneous alarm from any part of the plant. The system is so arranged that an alarm from any box designates the division and sub-division in the works and the nearest hydrant, the whistle blowing the number and indicating to the "Hustler Hose Co.," of the laboratories, the exact location of the fire, and the employees are occasionally, without warning, called out to provide against any unnecessary alarm in case of actual fire.

Mr. Beverly, who has charge of the cotton department, is an able and enthusiastic amateur photographer and took a photograph of the class, as he did later of the Philadelphia and the Brooklyn students. The entire morning was consumed by the New York students in viewing the works and inter-viewing the girls. The officers of the New York class are: President, P. Y. Ehrigott; vice-president, F. L. Wilcox; secretary, E. Imhoff, and treasurer, Alfred Horn.

Professors Remington and Ryan of the Philadelphia college left the peaceful quietude of the Quaker City (they must have left it for they did not have any of it with them) early in the morning with about sixty students selected apparently by competitive examination as to lung power. The morning was devoted to inspecting the Squibb laboratories, and at 1.30 P.M. the "trouble began," as they say at the Press Club dinners, on the train for East Orange. Special cars have been provided for these excursions which are clinker built, copper fastened and steel plated. A "mouth

organ" furnished the incentive to a lively competitive jig in the aisle of the car, though the continual interruptions of college yells rendered the music slightly disjointed not to say dismembered.

Professor Bartley and Mr. Knebel of the Brooklyn college were personally conducting a party of students from what Mr. Seabury terms "our little sister over the river."

These two parties inspected the works, posed for Mr. Beverly's camera, and divided up their surplus ribbons of college colors with the prettiest of the many pretty employees just as the New Yorkers had done in the morning, and on parting Mr. Seabury made them one of his characteristic and hearty speeches.

The officers of the class from Philadelphia are: President, A. W. Aughenbaugh; vice-president, H. F. Ziggler; secretary, G. W. Luft, and class reporter, John Cully.

The class from Brooklyn included two ladies, Misses E. M. Dickson and M. N. Buckman. The officers of the class



**Prof. W. B. McVey.**

Prof. W. B. McVey is a native of Kings County, New Brunswick, and moved with his parents in early life to St. Johns, where at the age of sixteen he entered the store of Harrington Bros. as an apprentice. During his apprenticeship he was instrumental in organizing a class among his fellow clerks to which Prof. Best, the Dominion analyst, gave weekly instruction in chemistry. At the end of his four years' apprenticeship he passed the Pharmaceutical Society examination, securing a first class diploma. He then went to Toronto and graduated from the Ontario College of Pharmacy. On his return he entered the employ of R. M. McCarty at St. Johns and shortly after was elected a member of the Pharmaceutical Council of New Brunswick, and later elected an examiner for the society. At the expiration of his three years' term he was appointed as government examiner. He ardently advocated the establishment of a lecture course by the society, but the movement was opposed at the time.

In 1890 he moved to Boston and undertook the management of a branch store for the Maverick Drug Co. He also took up a course of advanced study at Harvard. In 1895 he was appointed assistant in chemistry at the Boston Dental College and on the resignation of Prof. Sharpless became his successor. He has also occupied the chair of chemistry at the College of Physicians and Surgeons. He has been very successful and popular as a teacher and is a member of various scientific societies to which he has contributed papers of value, principally on toxicology.

from Brooklyn are: President, J. Eugene Toye; vice-president, J. J. Vetter; secretary, L. L. Wood; treasurer, H. M. Birtis, and valedictorian, W. J. Wilson.

"A fine opportunity this, to see practical pharmacy on a large scale," said the writer to an earnest if youthful student. "Yes," said he, "we have been talking and thinking about it for two years, about Seabury's—and the girls."

### Michigan Mention.

The drug store formerly conducted by C. W. Hale, Perrington, Mich., was sold at public auction Dec. 22.

S. F. Frizelle, druggist at 26 Michigan avenue, Detroit, has moved to the corner of Woodward and Gratiot avenues. This is a more desirable and central location.

The drug store of John J. Orr, at Tecumseh, Mich., was completely gutted by fire recently. His loss was \$4,000; insurance, \$2,000; origin of the fire unknown.

J. H. Vanner, traveling salesman for H. J. Milburn & Co., Detroit, was held up recently at St. Clair, Mich., and robbed of \$17.50. He was returning from Algonac, Mich.

It is said that John B. Russel, superintendent for Parke, Davis & Co., has resigned and will shortly take up his residence in New York City. He is still a director in the company and may not leave until Spring.

The Chapotin & Dustin Drug Co., Limited, Detroit, will shortly establish a retail drug store at 245 Woodward avenue. The firm recently held a floral and perfume display that attracted considerable favorable attention.

### Florida Facts.

A. E. Phillips' pharmacy in Sanford, Fla., is now conducted by his brother Lucien R., who is a registered pharmacist.

W. H. Lightstone has disposed of the Palmetto pharmacy corner of Bay and Clay streets, Jacksonville, Fla., to E. E. Cochran of Tampa.

George Hughes has been appointed special correspondent of the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD at Jacksonville, Fla.

W. A. Guild, who formerly conducted a drug store in Sanford, Fla., has gone to other parts. His store is now occupied by W. C. Aldridge who is doing a fine business.

A. E. Phillips, formerly of Sanford, Fla., is now in business at Clear Water Harbor, a small town on the line of the Orange Belt Railroad, Florida. Mr. Phillips is widely and favorably known as a writer on pharmacy and subjects of interest to pharmacists.

J. M. Dixon, pharmacist of Titusville, Fla., and M.D. by courtesy, has had his drug store (foundation and all) moved bodily across Julia street in that city, without disturbing a solitary vial. The feat was performed by W. H. Myers, a local contractor.

Mr. Dixon started in the drug business about two years ago without any previous knowledge of the business and has prospered so well that he thinks of opening a branch store in Jacksonville.

**Mr. Keenan's Trip South.**

Mr. Thomas J. Keenan, associate editor of the *AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD*, is on his way South in the interests of the paper. He spent Christmas Day in Havana, Cuba, and will stay some time on the island collecting information as to the status of the drug trade in Cuba. He is accompanied by Mr. A. R. Elliott, president of the American Druggist Publishing Co. Their progress through the Southern States has elicited comment from the daily newspapers of the cities he has visited, and from these we cull the following:

Mr. Thomas J. Keenan, editor of the *AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD*, of New York, is in town stopping at the Ebbitt. This is his first trip to the capital. Mr. Keenan is calling on our leading pharmacists.—Washington, D. C., *The Star*.

*The Dispatch* enjoyed yesterday a very pleasant call from Mr. Thomas J. Keenan, editor of the *AMERICAN DRUGGIST*, and Mr. A. R. Elliott, general advertising agent, New York. These gentlemen are on their way to Havana, and Mr. Keenan is visiting the friends of his paper among the druggists of Richmond.—Richmond, Va., *Dispatch*.

Mr. Thomas J. Keenan, editor of the *AMERICAN DRUGGIST*, the oldest and best known drug journal in the United States, is in the city, and is making many friends among our pharmacists. He is making a tour of the South Atlantic coast cities.—Charleston, S. C., *News and Courier*.

We had a pleasant call to-day from Mr. Thomas J. Keenan, associate editor of the *AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD*. Mr. Keenan is a pharmaceutical writer of large experience, and his paper shows evidences of influence and prosperity.—Charleston, S. C., *Evening Sun*.

Mr. Thomas J. Keenan, editor of the *AMERICAN DRUGGIST*, is in town, stopping at the De Soto. This is his first trip South, being on his way to Cuba and visiting the larger cities en route. He has called at many of our leading drug stores, and is looking up the needs of Southern pharmacists.—Savannah, Ga., *Morning News*.

Mr. A. R. Elliott, a well-known general advertising agent of New York, in company with Mr. Thomas J. Keenan, editor of the *AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD*, are in town for a few days. Mr. Keenan represents the leading drug journal of the country.—Savannah, Ga., *Evening Press*.

Messrs. Thos. J. Keenan, editor of the *AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD* of New York City, and A. R. Elliott, a prominent general advertising agent of New York City, are in the city stopping at the St. James Hotel. From here, they go to Havana, Cuba.—Jacksonville *Florida Times-Union*.

The current number of the journal of the Military Service Institution contains a well written article on Army Organization by Dr. A. E. Dickinson, of the Cudahy Pharmaceutical Co.

**Massachusetts Mention.**

The Massachusetts Board will meet next week to give a hearing to several out of town parties accused of violating the law.

Bert Chase has retired from his clerkship at Lord's drug store at Athol and will take a similar position in a Worcester drug store.

Geo. J. Schirch, formerly with E. T. Murphys & Co., and a graduate of Massachusetts College of Pharmacy, has passed a successful examination before the State board of Connecticut.

George L. Keeney will soon erect a temporary building on the site of the burned engine house at Monson, where he will conduct his drug business until more desirable quarters can be obtained.

The drug business owned by Dr. J. G. Burque on Essex street, Haverhill, has been sold by him to Henry and Charles Paradise, formerly residents of that place. They will open business at the same stand.

C. I. Robinson & Co. have opened a drug store in the new Harris block, Oakdale, which is nearly completed. Mr. Robinson is the first occupant and has one of the best looking stores in town. Everything is new and bright, and, with the large show windows filled with potted plants, makes a very pretty store.

Daniher & McFatridge is the name of the new firm which has purchased the Charles H. Morse drug store in Downs' block, Natick. Mr. James Daniher, the senior member of the firm, resides on South Main street, and is one of the best known citizens of Natick. Mr. McFatridge is a Waltham druggist of many years' experience and comes highly recommended.

J. Clarence Oxley has purchased W. S. Bickford's pharmacy at Reading. The new store will be run under the name of J. C. Oxley & Co. Several improvements will be made in the store. The former clerk at the store, Clarence T. Abbott, has been retained as manager and H. M. Goodwin of Wakefield, who has assisted Manager Oxley at Jordan's drug store, will assist Mr. Abbott.

J. A. Loomis has admitted his son Frank to a partnership in his drug business on Union street, Easthampton, under the firm name of J. A. Loomis & Son. The change was made on the day when Frank came of age. J. A. Loomis moved to Easthampton from Springfield in 1869 and worked for the Button Co. In March 1873, with his brother, E. P. Loomis, now a druggist on Main street, Springfield, he started in the drug business in the store he now occupies under the firm name of E. P. Loomis & Co. In 1875 he bought out his brother, moved to the store now occupied by F. D. Clifford and added groceries to his stock. He sold this department to Mr. Clifford in 1886, continuing the drug business in the small store adjoining, and in June last year returned to his old stand, which had been fitted up to be one of the handsomest drug stores in the vicinity. The new member of the firm was born in Easthampton, attended the public schools there and graduated from the scientific department of Williston seminary in 1891. He then went to Boston in the employ of Kelly & Durkee, attended two sessions of the M. C. P. and passed the State board examination.

**Convention of the Inter-State Retail Druggists' League.**

The following call for a meeting has been issued by the president of the Inter-State Druggists' League and should receive hearty response.

Boston, Mass., Dec. 26, 1893.

At the request of the New York City and other branches, a special convention of the Inter-State Retail Druggists' League will be held on Tuesday, Feb. 6, 1894, at Ionic Room, Terrace Garden, 147 East 58th street, New York City, at 10 o'clock A.M., to devise measures for the advancement of the league and the cause for which it was instituted.

It is earnestly hoped that local organizations throughout the country which have not yet joined the league will do so at once, so that the united wisdom assembled may tend to ameliorate existing conditions of trade among the retail fraternity. It costs but one dollar per year for each individual enrolled, and the possible and even probable results of such a pooling of interests may bring returns a hundred fold. Lack of complete organization has been the one cause of failure in past movements. With such organization we can accomplish all we desire—without it, absolutely nothing.

Heretofore it has been a difficult problem to solve the question of controlling the large army of retailers within one organization. The Inter-State League, being an aggregation of local associations or branches, sending delegates (one to a hundred) to a central or national body, seems to solve the difficulty, and secures as perfect representation as though the local associations were assembled in full. Each delegation receives its instructions from its home association. Each local organization can to a certain extent take care of its own market, but the national feature is essential, so that one section may not pull down what another section has built up.

The "Detroit" plan adopted at the recent meeting of the N. W. D. A. had previously been recommended to manufacturers by the league, and it is the most easily carried out plan, up to date. If followed out faithfully by all parties concerned, it must inevitably result advantageously to all. It is not necessary here to explain the plan in full, as it has already been published in all the pharmaceutical journals. Suffice it here to say that the Detroit convention was noted as being the most harmonious ever held by the N. W. D. A., and the retailers present emphatically helped to make it so. The plan then adopted, to be a success, must have the active support of jobbers and retailers. The antagonism of either means failure.

I would advise that the retailers confer with their jobbers in friendly convention, each for the good of the other. The former can help the latter in organizing by instructing their traveling men to solicit petitions from their retail customers to the manufacturers, asking them to adopt the retail feature of the plan. These same commercial men can aid us in forming local branches of the league; they make splendid canvassers, besides working in their employers' interests by so doing. The "drummer" is commonly looked upon as a sound and level-headed adviser. The manufacturers whose products are worth handling are ready when the retailers say so. Judging from what has already been done in some sections, we can deluge them with petitions.

My dear retail friends, if it is worth while at all to regain some of our lost prestige in certain lines of goods then it is worth some slight effort on your part. Come out of your shells! Put your shoulders to the wheel! If the measures suggested by earnest men who have given liberally of time, labor and money for years in your behalf are not to your liking then by your united wisdom show them a better way. At all events sink individuality for the common good.

It is a good sign to note, in localities where petitions are being extensively circulated for the Detroit plan, that the daily papers, at the instigation of their best friends, the advertising cutters, have already begun to expose this imposition (?) on the "dear public." The advertising cutter is a keen business man. No one knows better than he what can be done by united effort on the part of the legitimate trade. He feels that "there is something in the wind." He must "nip it in the bud" by a liberal dose of "bluff." I often wonder if the aforesaid "dear public" ever stops to think how enormously it must pay for goods not on the advertised (full page) list, for certainly these sold-at-cost, draw-you-in "baits" cannot support the immense establishment.

Pay no attention to these assaults. Remember that "to the victor belongs the spoils." Know your own strength, and knowing it, unite in any legitimate measure that promises success. Organize locally, and then join the league.

Robert J. Frick, corner 6th and Chestnut streets, Louisville, Ky., secretary of the League, will be glad to answer any questions you may be pleased to ask pertaining to his office, and it will make the treasurer, Frank H. Carter, Indianapolis, Ind., happy to receive your contributions. To those seeking information as to hotel accommodations or other matters relating to the meeting, our State executive, Mr. V. Kostka, 700 9th avenue, New York City, will be pleased to assist you, while the undersigned is ever at your service.

HENRY CAMDING, President.

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# AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD.

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### Examination Questions of the Virginia Board of Pharmacy.

#### EXAMINATION ON PHARMACY.

*What is meant by the following terms:*

I. (a) Filtration. (b) Exsiccation. (c) Distillation. (d) Comminution. (e) Maceration. (f) Solution. (g) Desiccation. (h) Crystallization. (i) Percolation. (j) Sublimation.

*Give the official Latin titles for the following preparations:* II. (a) Seidlitz powders. (b) Spirits mildererus. (c) Solution of arsenious acid. (d) Dried ferrous sulphate. (e) Red precipitate. (f) Calomel. (g) Fluid extract of cascara sagrada. (h) Blue mass. (i) Syrup of iodide of iron. (j) Paregoric.

III. (a) How much cocaine hydrochlorate would you use in making one drachm of 4% solution? (b) How would you make 10% ammonia water from the stronger water of ammonia containing 28%? (c) How would you make 6% acetic acid from the official acetic acid containing 36%? (d) How much opium containing 10% of morphine would you mix with 10 ounces of opium containing 18% to make an opium containing 14%. (e) How much carbolic acid would you use to make 4 ounces of 10% solution?

IV. (a) Outline the process for making syrup of wild cherry. (b) Why is this process used? (c) Upon what constituent does the virtue of this preparation depend? (d) Does that constituent exist in the bark in its natural state? (e) Why is glycerin used in this preparation?

V. (a) Which variety of cinchona is used in making tincture of cinchona U. S. P.? (b) What is the strength of this tincture? (c) What variety is used in making compound tincture of cinchona? (d) What is the strength of this tincture?

*Name the ingredients in the following preparations:* VI. (a) Laudanum. (b) Tincture catechu compound. (c) Bitter wine of iron. (d) Compound syrup squills. (e) Compound chalk powder. (f) Citrate of magnesia solution. (g) Chloroform liniment. (h) Fluid extract of buchu. (i) Cantharides cerate. (j) Aromatic sulphuric acid.

VII. (a) Give the official Latin title for lime water. (b) How should it be prepared? (c) How should it be preserved? (d) Why should it be so preserved, or what change is likely to occur if it is not so preserved? (e) What salt of lime does it contain?

VIII. (a) Give the official Latin title for deodorized tincture of opium. (b) How is it prepared? (c) What is the object of the process? (d) What is the strength? (e) Does the dose differ from that of laudanum?

IX. (a) What is the official Latin title for citrine ointment? (b) Name the ingredients used in its preparation. (c) Outline the process. (d) Should it be handled with steel spatulas or dispensed in metal boxes? (e) State your reason for your answer to sub-question (d).

X. (a) Give the official Latin title for the three U. S. P. solutions containing arsenic. (b) What is the quantity of arsenic in each? (c) What is the dose of each?

#### EXAMINATION OF CHEMISTRY.

I. State in plain language the influence of chemistry upon commerce, manufactures

and molecular weight. State its value alone and combined with alcohol in pharmacy. State all the facts you know with regard to rain water, well water and mineral waters. Enumerate four official waters and state the mode of preparation.

9. Iron.—Give its symbol, atomic weight and quantivalence. State how found in nature. Mention two oxides and four official salts. Give usual test. State the general therapeutic application of the salts of iron.

10. Borax.—Give official name. State two sources in nature. Give some account of its uses in the arts and in medicine. State the name of the acid made from borax and the two forms in which it is found in the shops. Mention a few of its properties in medicine and surgery.

11. Mercury.—Give official name, how found in nature. Describe the metal and state the two series of compounds it forms giving their quantivalence.

Enumerate six leading official compounds and mention their general therapeutic effects.

12. Arsenic.—Give Latin name of metal, state few of its remarkable properties. Give names of its combinations with hydrogen and oxygen and with oxygen alone.

Give two tests and mention the principal antidote, with one mode of quick preparation.

13. Aluminum.—Describe the metal, and state in what form it is found in nature.

Also give some account of several alums, with their general properties.

14. Antimony.—Give symbol and state reason for its being so called.

Enumerate few official combinations; describe and state therapeutic properties with doses.

15. Lithium.—State its remarkable property with reference to weight. Give list of the five official preparations and state their general therapeutic use.

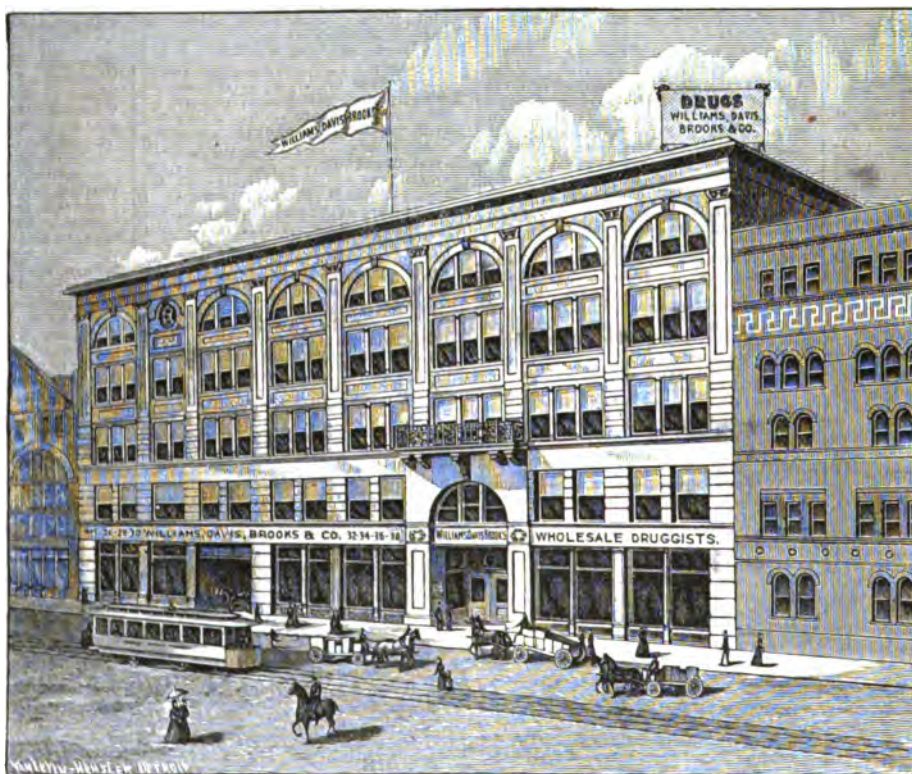
16. Liquor Ferri Chloridi U. S. P.—State the official mode of preparation without proportions. Give some account of the chemical changes or reactions. Describe the finished product and give test.

Mention name of the leading official remedy it contributes to make, with some account of the medicinal properties of the same.

17. Copper.—Give name of the one official preparation. Describe it and state therapeutic properties for internal and external uses.

Mention one or two antidotes.

18. Of what leading articles are the



THE NEW QUARTERS OF WILLIAMS, DAVIS, BROOKS & CO., DETROIT, MICH.

and agriculture, giving a few familiar instances.

2. State the approximate number of metals and enumerate ten.

3. State a few forms or combinations in which metals occur in nature. Mention the few which occur free or in metallic state.

4. Name the single heaviest and the single lightest metal.

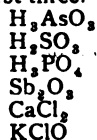
5. State a few facts with regard to symbols of elements and their atomic weights.

6. Describe sulphur, state how found in nature, give its properties, name two of its combinations with oxygen and hydrogen, also enumerate a few of its official forms or combinations.

7. Describe some of the forms of carbon with any interesting facts you may recollect. State some of its combinations with oxygen and some with hydrogen, enumerating some of their properties.

8. Give official name of water, its symbol

following the formulas. Give the quantitative of the first three:



#### EXAMINATION ON MATERIA MEDICA, AND TOXICOLOGY.

1. Define materia medica and toxicology.
2. (a) What parts of plants are generally used in medicine?  
(b) To what are the medical virtues of plants generally due?  
(c) Describe the difference between the root and stem of a plant?
3. Licorice: (a) Where is it found?  
(b) What part is used? (c) What are its medical properties and official preparations?
4. State the difference between annual, biennial and perennial plants, and give examples of each.
5. Balsam peru and balsam tolu. Give for each of these drugs: (a) The official name and habitat of the plant. (b) The mode of production. (c) Their characteristic properties. (d) Of what official preparations, if any, are they component parts?
6. Give official names, medical properties, official preparations and dose of each of the following: Deadly night shade, bitter sweet, fox glove, chamomile, witch hazel and queen's delight.
7. (a) What is the poison contained in Paris green?  
(b) What poisonous impurity is sometimes found in bismuth?  
(c) State the antidote for the poison.
8. Give five saline aperients, with their doses.
9. Give the official names of white, green and blue vitriol, with the dose and medical properties of each.
10. Give the meaning of the following terms, with one example of each:  

|               |              |
|---------------|--------------|
| Anthelmintic; | Antiseptic;  |
| Refrigerant;  | Vesicant;    |
| Cathartic;    | Expectorant; |
| Anodyne;      | Soporific.   |

#### A Fire-proof Drug Warehouse.

Williams, Davis, Brooks & Co., wholesale druggists, Detroit, occupy a building expressly designed for them and which embodies many features of originality not to be found in the business premises of similar firms.

Occupying a frontage of 130 feet, a

depth of 120 feet and height of 75 feet, the building is divided into three sections, separated from each other by heavy walls. The east section, which has 40 feet frontage by full depth, is used for manufacturing and storage. This floor, including the joist laid side by side and hardwood floor, is 9 inches thick. The west section is 90 feet wide, and is mill construction. Both buildings have steel columns and beams.

All columns and beams are covered with sheet metal lath, and are plastered with two coats of Portland cement. The 90 foot section is divided into two sections by a fire wall 16 inches thick. All doors throughout the building are covered with tin. Elevators in each section are inclosed in brick shafts. Each section is provided with wide iron stairs, inclosed in brick walls. Hose connections are on each floor, and the entire building is equipped throughout with the General Fire Extinguisher Co.'s Automatic Sprinkler System, having three sources of water

The third floor of this section is the finishing room, where all bottled goods are finished. The fourth floor is used entirely for the wholesale liquor department. The floor in the cellar of this section is laid in brick, so that every precaution is used to protect against fire. In the 90 foot section the first floor is devoted to the office and salesroom. This room is 90 feet front and 120 feet deep, and is one of the largest and handsomest offices in the United States. It is devoted to the druggists' sundries department. The entire front being taken up with the private offices of the different members of the firm. In the center is the city department, where a business of about half a million dollars is done annually. The counting room is said to be one of the most complete counting rooms of any wholesale drug house in the United States.

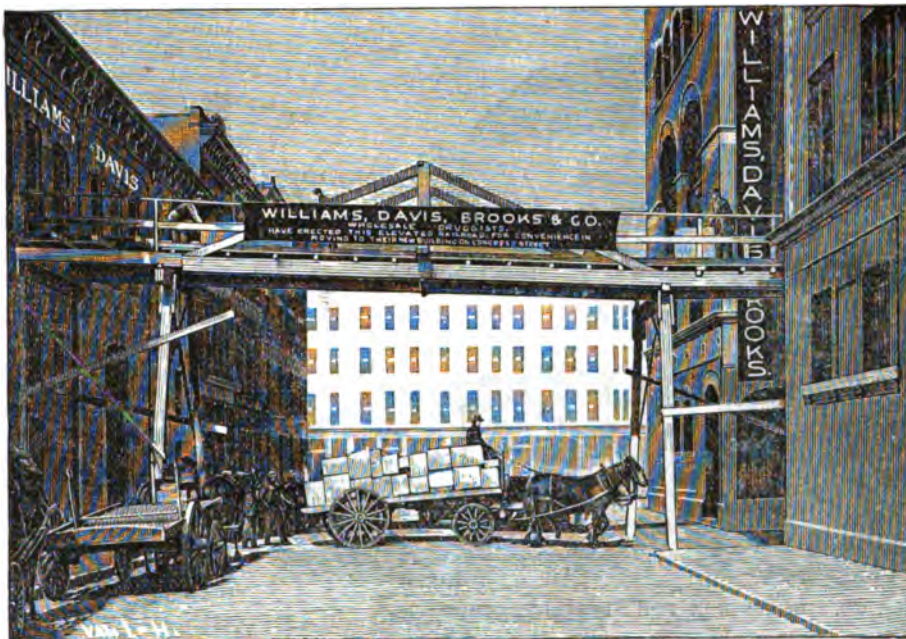
The second floor of this section is devoted entirely to druggists' sundries. The third floor is the beehive of the institution, where all the orders are put up. The fourth floor is devoted entirely to drugs and proprietary medicines, and the fifth floor to glassware and storage.

All of the above was gleaned by a representative of this paper on a recent visit to Detroit. Of the members of the firm of Williams, Davis, Brooks & Co., William C. Williams has been connected with the firm and its predecessors for upward of forty years. James E. Davis, ex-president of the N. W. D. A., who is the second member of the firm, has been connected over thirty years, and A. S. Brooks over fifteen years. Mr.

Williams was educated in the mysteries of the business when he was a young boy, and when he first started the old concern did a retail business. Mr. Davis has had a similar experience from boyhood, and has passed through every department of the business, from errand boy at the beginning, to a member of the firm at the end. Mr. Brooks, the buyer, is thoroughly experienced, having had a great many years' study in that particular department. Mr. Davis is the general manager, and Mr. Williams is the financial manager.

#### Monograph on Belladonna

Belladonna forms the subject of a very interesting monograph which has been prepared under the editorship of Fred. B. Kilmer, Ph.C., and published by Johnson & Johnson, of New York. We quote from advanced sheets of the monograph some excellent work from the pen of Henry Kraemer, Ph.G., whose contributions open the monograph. Among the authors whose



ELEVATED ROAD BUILT TO TRANSFER WILLIAMS' DAVIS, BROOKS & CO.'S STOCK TO THEIR NEW BUILDING.

supply,—the city system connected with reservoir, a 10,000 gallon storage cistern in the basement, and a 5,000-gallon pressure tank above top floor; also provided with an underwriters' steam pump.

The engine and boiler room is located in the 90 foot section in the basement. It is inclosed in brick walls and arched overhead with brick arches on steel columns, and is entirely disconnected from the balance of the basement. The building is heated with steam and lighted by electricity, and special care has been given to these features, to guard against danger from fire.

The powdering, grinding and sifting mills are run by an electric motor, electricity being supplied from the dynamo in the basement.

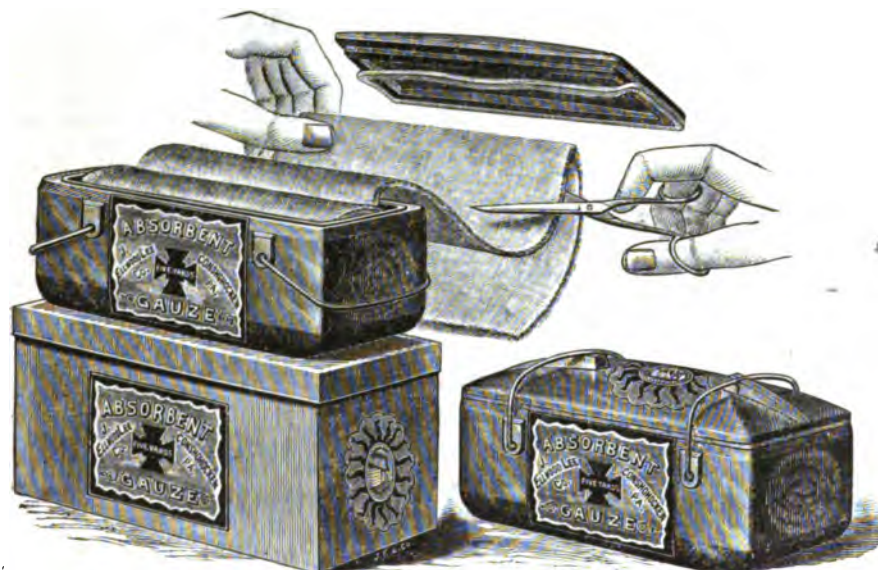
The second floor of the 40 ft. section is the laboratory and mill room. In this room are the percolators for making fluid extracts and the steam kettles, sand baths, etc., for the manufacturing of pharmaceutical preparations, and the grinding and powdering mills.

contributions appear in the volume besides Messrs. Kilmer and Kraemer are the following: Chas. Rice, Ph.D.; Prof. John M. Maisch, Prof. J. U. Lloyd, J. P. Remington, Ph.M.; R. G. Eccles, M.D.; H. C. Wood, M.D.; W. C. Caldwell, M. D.; Prof. John B. Smith, Prof. A. R. L. Dohme and Robt. W. Johnson.

Any pharmacist or physician interested in this work may secure a copy free of charge by writing to Johnson & Johnson, New York City, and mentioning this journal.

### The Secret of Success.

The secret of money making is to have what people will buy and to be able to sell it so as to make a profit. The Scates Medicine Co., Westbrook, Me., have apparently taken a long step toward placing druggists in the way of making money on family medicines, a thing they haven't done for years in the Eastern States. If you want to know how this is done write them for the details of the Scates plan, mentioning this paper.



J. ELWOOD LEE CO.'S GLASS BOX FOR STERILIZED DRESSINGS.

### Hospital Supplies.

By making a special study of the needs of hospitals the J. Elwood Lee Co., of Conshohocken, Pa., are enabled to offer special facilities to those about to purchase hospital supplies and will furnish an interesting and valuable catalogue of such supplies to any one writing them who mentions this journal when writing. There is an opening in this line for druggists in a good many quarters, and if you are located near any hospital it is quite probable that by submitting a bid to the hospital authorities based upon this catalogue you could secure a profitable contract.

Their patented box jar illustrated herewith received special mention at the World's Fair, and is considered to be one of the best antiseptic containers for dressings that are now on the market. The gauze can be drawn out of the jar without removing the roll, it can also be made aseptic by heat at any time, as the jars are all properly annealed and can be placed in an oven or sterilizing apparatus, and subjected to any reasonable heat for any length of time. All of their dressings are thoroughly sterilized by heat before they

leave the laboratory. But the advantage of the glass box can be realized by the fact that if the surgeon has opened the jar and used a part of the gauze he can sterilize what remains himself without any trouble.

They are selling large quantities of these jars, and as their trade is constantly increasing, this may be considered abundant evidence that it is taking well with the profession.

### In Winter Time.

The cold, wet weather is the cough season. That means it is the season for cough drops, and there are probably more licorice drops sold than there are of all other cough drops together. The question of how much licorice you sell is largely dependent upon what kind you keep. If you don't believe this, try selling Mellor & Rittenhouse's and of letting people know you do. You will find your licorice sales increase, and that means an extra stray purchase every time the customer stops in for "some of those licorice pellets."

cost alone that the hot soda fountain may be expensive. A cheap fountain is apt to be dearer than an expensive one after repairs have been paid for.

That is the strong point about Dean, Foster & Co.'s hot soda fountains. The initial cost is moderate, the repairs nothing, for some years at least. Write them at 14 Blackstone street, Boston, for free catalogue of their hot soda apparatus, mentioning this paper.

### Profitable Manufacturing.

The profits in manufacturing depend largely upon the methods and means employed. Use antiquated methods and unreliable apparatus and you will think that there is no money to be made in manufacturing. Use the best methods and apparatus and you will be convinced that there is money in it. If you want to make compressed tablets, for instance, write to Robert Schoemaker, Jr., Philadelphia, tell him about what scale you want to make them on, and get his advice as to the sized machine to purchase. He will, of course, advise you to purchase one of his own make, but then everybody that has used them would advise the same thing, no doubt. He can give you many practical hints about making compressed goods generally. When writing won't you please mention THE AMERICAN DRUGGIST?

### Specialists in Stockings.

C. W. White & Co., 99 Court street, Boston, have special advantages in the manufacture of elastic stockings, in the way of improved patent machinery, which performs work with wonderful precision and perfection unequaled by the human hand, and enables a skilful weaver to earn higher wages, thereby giving them a long waiting list of applicants from which to select the most skilful. All the materials that enter into the construction of their stockings are carefully tested, selected, and brought from the various parts of the world which are noted for their superior production. With this combination, improved machinery, skilled operators, and superior materials, the result must inevitably be a most superior stocking. For this they charge no more than a cheaper stocking costs. They guarantee every stocking perfect in construction and material, and true to measures. For methods of measuring and discount sheet, address C. W. White & Co., 99 Court street, Boston, mentioning this journal.

## Review of the Wholesale Market.

NEW YORK, December 27, 1893.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

The last week of the business year has as usual been devoid of interest so far as the general drug market is concerned. Such changes as have occurred are few and for the most part unimportant.

### DRUGS.

ALCOHOL.—The competition from outside distillers is reported quite aggressive at the moment, but the trust maintain their quotations at the recent advance to \$2.24 @ \$2.26.

Write Mellor & Rittenhouse Co., Philadelphia, Pa., about them, mentioning this journal, and get price list and trade discount sheet.

### Treatment of Grip.

Have you had Wyeth's latest list of tablets? It embraces some valuable combinations suitable for treatment of the grip. Write to John Wyeth & Bro., Philadelphia, for a free copy, mentioning this paper. It has some interesting suggestions as to the treatment of grip.

### Does Hot Soda Pay?

That depends upon several considerations, which may be enumerated in the order of their consequence something like this:

It pays—

If your soda is hot.

If your soda fountain is not too expensive.

If your soda is well flavored.

If your soda is rightly served.

The determination of all these points lies within the compass of your own volition. But remember that it is not in the initial









2 gal  
256 +

